

TIRLEY TO DYMOCK

Proposed High Pressure Natural Gas Supply Pipeline

ARCHAEOLOGICAL FIELDWALKING, FIELD RECONNAISSANCE AND GEOPHYSICAL SURVEY

Prepared by
NETWORK ARCHAEOLOGY LTD
On behalf of
Mouchel Consulting Ltd
for
TRANSCO

Report No. 279
January 2002

Contents

	SUMMARY	1
1	INTRODUCTION	2
2	DESCRIPTION OF PROPOSED PIPELINE ROUTE	4
3	SURVEY PROCEDURES	6
4	CRITERIA FOR GRADING SITES	8
5	RELIABILITY AND POTENTIAL LIMITATIONS OF DATA	10
6	RESULTS	11
7.	ASSESSMENT OF IMPACTS AND RECOMMENDATIONS	13
7.1	General Impacts and Recommendations	13
7.2	Important Hedgerows	14
7.3	Other Field Boundaries	15
7.4	Geophysical Anomalies	15
7.5	Site-specific Impacts and Recommendations	16
7.5.1	Category D Sites	16
7.5.2	Category E Sites	19
7.6	Desk Based Assessment - areas of archaeological potential	21
9	REPORT, FINDS AND ARCHIVE DEPOSITION	23
10	STATEMENT OF INDEMNITY	24
11	ACKNOWLEDGEMENTS	25
12	REFERENCES	26

Appendix A	Explanation of Phased Approach to Mitigation Measures
Appendix B	List of Abbreviations
Appendix C	Gazetteer of Plot Data
Appendix D	Table of Finds
Appendix E	Specialist Reports
Appendix F	Summary Table of Fieldwalking, Reconnaissance and Geophysical Survey Results
Appendix G	Figures 1 – 19

SUMMARY

General

This report presents the results of archaeological field walking, field reconnaissance and geophysical survey of the proposed Transco high-pressure gas pipeline between Tirley and Dymock in Gloucestershire.

Results

The surveys found D or E grade areas of archaeological potential in twenty-seven of the plots crossed by the proposed route.

Most of the D and E grade areas comprise magnetic anomalies of uncertain character, including some pit-like and linear features. Some of the anomalies are of likely archaeological significance, whilst others are of uncertain archaeological significance. Some low density scatters of brick and tile, tap slag, and a single sherd of Iron Age pottery may be archaeologically significant. Earthworks representing ponds / quarry pits and former field boundaries were also present. At this stage, the D and E grade sites are felt to have a low archaeological potential, but they are nevertheless significant and should not be dismissed.

Recommendations

For the areas of archaeological significance/potential, and for the route as a whole, specific recommendations for further investigation are summarised as follows:

- Trench evaluation - Plots 6, 9, 18, 19-20, 21, 28-29, 32, 40, 41, 41, 47, 51
- Minimisation of working width, and detailed monitoring during construction with provision for sampling of palaeoenvironmental deposits of archaeological significance - Parish boundaries in Plots 20/21, 32/33
- Minimise working width and record during construction - all hedges on historic boundaries, particularly parish boundaries in Plots 42/43, 52/53, 58/59
- Watching-brief during construction of the entire route

In addition, there are two C grade sites, flagged up by the desk based assessment, which were not corroborated by the field surveys:

- DBA:AE - Plot 23
- SMR 04418.1/2 - Plot 46

These should be considered for trench evaluation.

1 INTRODUCTION

1.1 Background

Transco has identified the need to reinforce its National Transmission System within the south west of England and Wales. Transco propose to construct a maximum 900mm (36”) diameter high pressure pipeline between the existing Transco Above Ground Installations at Tirley (SO 815 295) and Dymock (SO 697 303) (Figure 1), within the Forest of Dean District, Gloucestershire. The approximate length fo the pipeline is 13.7 km with a maximum operating pressure 75 bar g.

A staged approach has been applied to the archaeological investigation of this pipeline (see Appendix A):

- Feasibility Study undertaken by RSK (November 2000)
- Archaeological Desk Based Assessment undertaken by Network Archaeology Ltd (August 2001). This report formed the basis of the Cultural Heritage section of a non-mandatory Environmental Statement undertaken to meet the requirements of the new *Public Gas Transporter Pipelines and Works (Environmental Impact Assessment) Regulations (1999)*. References are made to sites flagged up by the desk based assessment, throughout the text of this field survey report.
- Archaeological Field Reconnaissance Survey (of new areas which were not encountered by the proposed pipeline route at the desk based stage of assessment) undertaken by Network Archaeology Ltd. (current).
- Archaeological Field Walking Survey undertaken by Network Archaeology Ltd. (current).
- Geophysical Survey undertaken by Bartlett Clark Consultancy for Network Archaeology Ltd. (current).

This report summarises and integrates the findings of the desk based assessment with the archaeological field reconnaissance, fieldwalking and geophysical surveys, as well as making recommendations for further investigation and mitigation.

1.2 Context of Pipeline Assessments

- 1.2.1 Linear developments such as pipelines provide an opportunity to examine a transect across a landscape and the evidence of past human activity preserved within it.
- 1.2.2 Potentially, pipelines can severely impact upon the archaeological resource. Close co-operation between archaeologist and engineer is essential to ensure that the impact on the archaeological resource is minimised.

1.2.3 Identification of archaeological sites at an early stage allows for forward planning of appropriate mitigation measures, such as route modifications, site-specific investigations in advance of construction, and restricted working width.

1.3 Scope of Assessment

1.3.1 The objectives are to:

- assist Transco in the selection of an archaeologically least-damaging pipeline route.
- determine the presence or absence, extent, character, condition, quality and date of any sites of archaeological significance along the proposed pipeline route
- assess the archaeological potential of the pipeline route
- recommend mitigation measures: avoidance, minimisation of impact or evaluative fieldwork

2 DESCRIPTION OF THE PROPOSED PIPELINE ROUTE

2.1 Location and Topography

- 2.1.1 The proposed pipeline route lies about eight kilometres to the north of Gloucestershire. The pipeline runs for approximately 13.7 km in a generally east to west direction between Tirley AGI and Dymock AGI (Figure 1).
- 2.1.2 Leaving Tirley AGI (40m AOD), the proposed pipeline heads west south west, initially parallel to the B4211, and then bending gradually in a more westerly direction. The proposed route descends gently, as it passes between Corse and Oridge Street, before crossing the Glynch Brook, and the River Leadon (20m AOD). After skirting the north side of Collinpark Wood, the proposed route heads north west, over more rugged terrain, with steep hills up to 70m AOD. The route turns west towards Dymock AGI (50m AOD), just before crossing the B4215.

2.2 Geology, Soils and Land Use

2.2.1 Solid Geology

The eastern half of the proposed pipeline route is underlain by formations belonging to the *Mercian Mudstone group*. These include: *Arden Sandstone*; *Skerry*, a hard, blocky red and green mottled siltstone, or silty mudstone, or thinly bedded green/grey sandstone; and *Blue Anchor Formation*, which which comprises greenish grey siltstones and silty mudstones, is found to the south east of Staunton and forms the uppermost 3-10m of the *Mercia Mudstone group*.

About a quarter of the proposed route is underlain by *Bromsgrove Sandstone* (the upper section of the *Sherwood Sandstone Group*), which crops out to the south of Bromsberrow Heath. The geology comprises reddish to yellowish brown conglomerates, pebbly sandstones, sandstones and thin red brown mudstones.

The western portion of the proposed route is underlain by *Raglan Mudstone* (part of the *Lower Old Red Sandstone Group*). This comprises red-brown, micaceous mudstones and siltstones with subordinate sandstones and concretionary limestones as cornstones (BGS 1979).

2.2.2 Drift Geology

Narrow bands of *alluvium* are found along the River Leadon, the Glynch Brook and most of the smaller watercourses in the study corridor. River terrace deposits, comprising silts, sands and gravels laid down by present and former rivers, are found along the courses of the River Leadon and the Glynch Brook. In places, these deposits have built up to form a series of terraces. The deposits do not exceed four metres thickness.

Glacial deposits include *Upleadon Gravels* through the central Bromsgrove Sandstone region, and *Woolridge gravels*, found to the east of Staunton. The *Woolridge gravels* mainly consist of *Bunter quartzite* pebbles and *silurian fragments* (BGS 1989, 1994).

2.2.3 Soils

The soils across the area reflect the underlying solid and drift geology. The eastern half of the route, is mainly overlain by reddish, fine loamy or fine silty over clayey soils (*Whimple 3*). This is ideally suited to stock rearing, dairying, temporary grassland, and winter cereals.

To the east of Staunton there is a pocket of *Brochurst 2*. This is a slowly permeable, seasonally waterlogged, reddish clayey soil, suitable for winter cereals, short term grassland, stock rearing and dairying.

Bands of slowly permeable reddish, clayey soils (*Worcester*) lie to the east and west of Staunton. These soils are ideal for grassland, dairying, stock rearing, and for winter cereals in drier districts.

A band of well drained, reddish, sandy and coarse loamy soils (*Bridgnorth*) lies in the vicinity of Compton Green. Cereals, potatoes, horticultural and fruit crops are grown on this type of soil, with some permanent grassland and woodland on steep slopes.

Bromsgrove, a well drained reddish coarse loamy soil, is located over the area to the east of the M50, in the vicinity of Botloes Green. Grassland is predominant in moist districts, but cereals, sugar beet, potatoes, some field vegetables and fruit can be grown in this soil.

The west end of the route is overlain by a well drained, reddish, fine silty soil (*Bromyard*), which is suitable for cereals, short term grassland, stock rearing, some hops, and deciduous woodland on steep slopes (SSEW 1983).

3 SURVEY PROCEDURES

3.1 Establishment of the proposed pipeline centreline

The fieldwalking survey grids were positioned in each field by reference to Ordnance Survey co-ordinates measured from the 1:2500 strip maps, and located using a sub-5m accuracy GPS system.

In addition, the geophysical survey was positioned in each field by reference to Ordnance Survey co-ordinates measured from the 1:2500 strip maps, and located with a sub-1m accuracy GPS system. This method allowed a series of intermediate markers as needed for the magnetometer survey to be placed rapidly across each field.

3.2 Field Reconnaissance Survey

This consisted of a visual inspection of all new areas which were not encountered by the proposed pipeline route at the desk based stage of assessment, in order to record extant earthworks, significant soil or vegetative anomalies, the nature of land boundaries, present (and former) land use, visible geology, and general topographical variations. Observations were recorded on pro-forma record sheets.

3.3 Fieldwalking Survey

Fieldwalking was carried out by a team of three to four archaeologists walking at 10m spacings within each arable field. Five traverses were walked, centred on the centreline of the proposed pipeline's working width. This gave a 40m wide survey area, and provided approximately 25% coverage of the ground within this area. Details of each field or land parcel walked (including weather/light conditions, crop type, ground visibility, relief, walkers present) were recorded on pro-forma record sheets. These form part of the project archive.

Recovered artefacts within each 10m stint of each transect, were given a unique alphanumeric reference.

All artefacts were collected unless of certain modern date. In the case of large scatters of brick or tile, the position was recorded and a representative sample taken.

3.4 Geophysical Survey

Magnetometer and Magnetic Susceptibility Survey

This work was carried out using the two techniques of magnetometer and magnetic susceptibility surveying. The magnetometer survey was arranged as a 15m wide sample strip along the full length of the proposed route. The route was surveyed as completely as possible with the exception of plot 40, which was under foot and mouth restriction.

The area surveyed was equivalent to coverage of a sample area of about 40% of a proposed 36m wide pipeline working width. The susceptibility survey was based on readings taken at 12.5m intervals.

Additional geophysical specification can be found in the separate geophysical survey report (Bartlett-Clark Consultancy 2001).

4 CRITERIA FOR GRADING SITES

Sites identified by the field surveys have been graded on two criteria:

- Significance
- Impact

4.1 Significance

In order to provide an indication as to the level of constraint a site might place on the proposed pipeline, each has been categorised in accordance with the system used for the desk-based assessment (Network Archaeology Ltd., 2001).

The inclusion of a site in a particular category often involved a degree of subjective judgement. The categories should not be taken as a statement of fact relating to the archaeological importance or value of a particular site. Categories are not fixed and there is every possibility that the classification of a site may change as a result of findings made during later stages of investigation.

Grade	Description	Examples	Mitigation
A	Legally protected site	Scheduled Ancient Monuments, listed buildings, conservation areas	To be avoided
B	Nationally significant site, currently not legally protected	major settlements (e.g.. villas, deserted medieval villages), burial grounds, standing historic buildings	To be avoided
C	Regionally significant site	some settlements, finds scatters, Roman roads, sites of historic buildings	Avoidance recommended
D	Locally significant site	field systems, ridge and furrow, trackways, wells	Avoidance not recommended at this stage
E	Other site	single find spots of various dates, modern field boundaries, drains & ponds	Avoidance unlikely to be recommended

Table 1: Site category definitions

4.2 Impact

4.2.1 The potential impact of the proposed pipeline on the archaeological resource will be:

<i>Direct (D)</i>	Physical damage including compaction and/or partial or total removal Severance of archaeological features, in particular linear features
<i>Indirect (I)</i>	Visual intrusion, affecting the aesthetic setting of sites or landscape

	Disturbances caused by vibration, dewatering, changes in hydrology <i>etc.</i>
<i>Uncertain</i>	Where the physical extent or survival of a site is uncertain or where the visual impact of the proposed scheme on the setting of sites or landscape features has not been determined
none	no impact due to distance from the proposed pipeline's working width, and/or construction technique (e.g. auger boring) removes the impact

Table 2: Impact definitions

Impacts can occur during the construction phase of the proposed pipeline: topsoil stripping, soil storage, movement of heavy machinery, excavation of the pipe trench and working width reinstatement can all have a permanent, damaging effect on the archaeological resource.

4.2.2 The magnitude of direct and indirect impact will vary:

<i>Severe (sev):</i>	entire or almost entire destruction of deposits
<i>Major (maj):</i>	a high ratio of damage or destruction to deposits
<i>Minor (min):</i>	a low ratio of damage to surviving archaeological deposits
<i>Uncertain (Unc):</i>	e.g. because the quality and extent of deposits are unknown, or because construction techniques have not yet been decided.

Table 3: Magnitude of impact

4.2.3 Factors affecting the significance of impact include:

- the proportion of the archaeological remains affected.
- the integrity of the archaeological remains; impacts may be reduced if there is pre-existing damage or disturbance of a site.
- the nature, potential and heritage value of archaeological remains

Impact can occur during the construction phase of the proposed pipeline: topsoil stripping, soil storage, movement of heavy machinery, excavation of the pipe trench and working width reinstatement can all have a permanent, damaging effect on the archaeological resource.

5 RELIABILITY AND POTENTIAL LIMITATIONS OF DATA

5.1 The limitations of an archaeological impact assessment of the proposed pipeline include:

- the absence of field survey data for parts of the proposed route.
- the differential levels of “archaeological visibility” along the route. A plot in ideal condition for field reconnaissance survey may not be suitable for the recovery of finds.
- the lack of clarity surrounding the extent of some sites. This makes it difficult to provide a precise assessment of potential impact.
- the necessity of making subjective interpretations of the archaeological significance of field observations and finds scatters geophysical anomalies. An absence of surface finds could be a genuine absence, but equally could be the result of a well preserved site.

The development of mitigation strategies should take these points into consideration

6 RESULTS

(see Appendix B for field conditions).

6.1 Field Reconnaissance Survey

In addition to the earthworks identified by the field reconnaissance survey undertaken during the desk based stage of assessment (Network Archaeology Ltd., 2001), this survey identified five fields which contained earthworks or vegetation marks, of certain or potential archaeological significance. They include two former ponds and two former field boundaries, and a possible ditched enclosure.

6.2 Fieldwalking Survey

Most of the artefacts recovered by the fieldwalking survey appeared to be the result of post medieval manuring. Much of the later pottery was found to be significantly less abraded than the medieval or earlier fragments, which indicates that not only had the later pieces been more recently incorporated into the plough soil, but that they may have been deposited some time after their period of use, and / or that areas were newly cultivated from the post medieval period onwards. A single, unabraded sherd of Iron Age pottery (plot 9) could be significant as it is unique along the proposed pipeline route. Tap slag, found in two plots (36 and 55) may also be significant, as could two scatters of ceramic building material (plots 20 and 40).

6.3 Geophysical Survey

Magnetometer and Magnetic Susceptibility Survey

(see appendix G, figures 3-19)

Eleven of the plots surveyed produced ten areas of weak, isolated and/or incoherent magnetic anomalies that are not necessarily archaeologically significant. However, a moderate to high degree of confidence was given to the archaeological significance of eight other groups of anomalies.

6.4 Coincidence of Sites found by Field Reconnaissance and Geophysical Survey

6.4.1 Field reconnaissance, fieldwalking and geophysical survey are complementary prospecting techniques, the combined results of which can be crucial in interpreting the character of any site. For instance, a site with positive geophysical survey results and no coinciding finds may indicate either that the site is well preserved, or that the site is prehistoric or Saxon, since pottery of these periods was produced in smaller quantities, and is usually less robust than other pottery. In contrast, a positive geophysical site rich in finds may indicate that the site is currently being truncated and the finds being incorporated into the ploughsoil.

6.4.2 A combination of five landscape features identified by the most recent phases of field reconnaissance survey, three artefact scatters found by fieldwalking, and eighteen areas of

magnetic anomalies and/or raised susceptibility are categorised D to E and discussed below.

6.5 Areas with little or no apparent archaeological potential

Parts of the proposed pipeline route cross areas with few or no known archaeological remains. The possible reasons for this may include:

- low levels of “archaeological visibility” along the route;
- unresponsive soils or geology which hamper the detection of sites by geophysical survey;
or
- a genuine absence of archaeological remains at certain points along the pipeline route.

7 ASSESSMENT OF IMPACT AND RECOMMENDATIONS

7.1 General Impact and Recommendations

7.1.1 The following stages form the basis of the site-specific recommendations made in section

- **Avoidance**

Every effort should be made to avoid an impact upon significant archaeological remains by preservation *in-situ*.

- **Minimisation of Impact**

Unavoidable impacts upon significant archaeological remains should be minimised by restricting the working width to the minimum practical level, laying protective materials, and/or careful reinstatement procedures.

- **Evaluation** (Appendix A - Stage 4)

Significant and unavoidable archaeological constraints identified by the desk based assessment or field surveys, will require archaeological *evaluation* in advance of construction. Evaluation might involve machine-excavated trenches, hand-dug test-pits and/or hand auguring of specific sites within the proposed pipeline's working width. The objectives are to confirm the presence or absence of archaeological deposits, to determine their character, extent, date and state of preservation, and to produce a report on the findings.

7.1.2 Further Mitigation Measures

Excavation (Appendix A - Stage 5)

It may not be possible or desirable to avoid significant archaeological remains identified by an archaeological evaluation. *Excavation* of any such sites should take place preferably in advance of construction. Excavation involves machine stripping of open areas within the proposed working width followed by archaeological investigation. The objectives are to obtain a full record of the archaeological remains prior to construction, and to produce a report on the findings.

Watching Brief (Appendix A - Stage 6)

A permanent-presence watching brief will be required during all ground disturbing activities of the construction phase of the project, to record unexpected discoveries, and known sites which did not merit investigation in advance of construction. The main phases of monitoring will be topsoil stripping, trench excavation and the opportunistic observation of the pre-construction drainage. The objectives are to obtain a thorough record of any archaeological remains found during construction, and to produce a report on the findings. Contingencies should allow for salvage excavation of significant, unexpected archaeological sites found during construction.

In addition to the pipeline easement, the sites used for associated engineering works should also be included in the watching brief: Pipe storage areas, site compounds, road crossing easements and block valve sites.

Project Archive and Publication (Appendix A - Stage 7)

A post-construction programme for dealing with all finds and records of investigated archaeological remains should be implemented, and where appropriate, the drafting of articles for publication.

Project Design

The above mitigation measures should form the basis of a project design produced by the archaeological contractor commissioned for each stage.

County/District Monitoring

The Senior Planning Archaeologist for Gloucestershire, Charles Parry, should be invited to monitor the implementation of the archaeological project design, and should be informed of any significant archaeological sites found at each stage. Provision should be made for the Senior Planning Archaeologist to monitor fieldwork in progress, and also to visit the construction site.

7.2 Important Hedgerows

Hedgerows which risk damage or removal are required, by the Hedgerow Regulations 1997 (Section 97 of the Environment Act 1995), to be assessed according to a number of historical and ecological criteria.

Under the regulations, a hedgerow is regarded as important on archaeological or historical grounds if it:

- marks a pre-1850 parish or township boundary;
- incorporates an archaeological feature;
- is part of, or associated with, an archaeological site;
- marks the boundary of, or is associated with, a pre-1600 estate or manor, or
- forms an integral part of a pre-Parliamentary enclosure field system (DOE, 1997).

An archaeological site is defined as a Scheduled Ancient Monument (SAM) or a site recorded in a County Sites and Monuments Record (SMR).

The Hedgerow Act defines a pre-Parliamentary enclosure field system as any field boundary predating the *General Enclosure Act of 1845*.

Impact: Forty-one hedgerows were identified at the desk based stage of assessment (Network Archaeology Ltd., 2001) as historically important according to the criteria of the Hedgerow Regulations (1997). Due to route changes, hedgerows in plots 22-28 are no longer affected, whilst two additional historically important hedgerows (plots 71/72,

72/29) will now be crossed by the proposed pipeline. A minimum 15m wide cross section of each hedge boundary will be affected. Hedgerows on parish boundaries (plots 20/21, 32/33, 42/43, and 52/53) will also be affected. These are discussed below.

Recommendations: The construction programme should aim to minimise the disturbance of historic boundaries, by reducing the working width for those which are unavoidable, and by sensitive reinstatement. Where possible, a cross section of any banks, ditches, archaeological layers and deposits should be recorded during the course of an archaeological watching brief. Provision should be made for the sampling of archaeologically significant layers sealed beneath banks.

7.3 Other field boundaries

7.3.1 Existing Field Boundaries

As already stated in the archaeological desk based assessment (Network Archaeology Ltd., 2001): A number of existing boundaries correspond to the positions of field boundaries marked on maps pre-dating 1845, and can therefore be considered 'historic'. However, they are not marked by hedgerows, and therefore do not fall under the protection of the hedgerow regulations.

Impact: The proposed pipeline route crosses four existing 'historic' boundaries (Plots 45/46, 53/54, 55/56, and 58/59), which are not marked by hedgerows. Each boundary is represented by one of the following: a track, a post and wire fence, a ditch, and a small stream. A relatively small cross section of each boundary will be affected.

Recommendations: Cross sections of the boundaries could be recorded during the course of a watching brief. Archaeologically significant layers sealed beneath banks may require sampling.

7.3.2 Former Field Boundaries

The possibility that some former field boundaries represent ancient land boundaries means they should be regarded as potentially important historic landscape features. They are significant because they give an indication of past land division and land use. Fifty-four former field boundaries flagged up by the desk based assessment will be crossed by the proposed pipeline. The field reconnaissance survey at the desk based stage, corroborated four former field boundaries, and identified two previously unknown former field boundaries (Network Archaeology Ltd., 2001).

Impact: Direct, minor; Two further former field boundaries were corroborated by field reconnaissance on the re-route in plots 71 and 72. Two possible former field boundaries were flagged up by the geophysical surveys. A relatively small cross section of each former field boundary would generally be affected. These discussed below (7.5.2).

Recommendations: It would be appropriate to record a section through any ancient boundary remains during a construction watching brief.

7.4 Geophysical Anomalies

Fewer sites were encountered by the geophysical survey than expected for the area, which at desk based stage of assessment was found to have a generally moderate density of

archaeological sites. The relative lack of findings could be due to the sandstone based geology of the region, which is not always strongly responsive to magnetometer surveying.

Recommendations: In order to test whether the findings of the geophysical surveys are a true representation of the underlying archaeology, trench evaluation of the eight D grade areas of anomalies is recommended. This would be a relatively efficient and cost effective means of ascertaining the risk of encountering significant archaeological deposits.

7.5 SITE SPECIFIC IMPACTS AND RECOMMENDATIONS

(see Appendix G, Maps 1-2, for site locations)

7.5.1 Category D Sites

Plot 9 (Figure 2, NGR 380240 228750)

A single unabraded pottery sherd retrieved during fieldwalking of this plot indicated possible Iron Age occupation. However this tenuous evidence was not corroborated by geophysical survey.

Impacts: Direct, uncertain; The area where the pottery sherd was found, will be crossed by the proposed pipeline, but the nature and substantiveness of archaeological remains represented by the sherd is uncertain.

Recommendations: Trench evaluation in advance of construction should aim to establish whether there are any deposits associated with the artefact.

Plots 19 - 20 (Figure 2, NGR 378320 227980)

A low density scatter of post-medieval brick from plot 20, and a large, unabraded sherd of late medieval pottery from plot 19 were retrieved during fieldwalking, whilst the geophysical survey detected some isolated, ill-defined linear features and dispersed pit-like anomalies in both plots. The sherd may have resisted erosion as it is from the thickest part of a vessel, and is not necessarily fresh. None of the features were of conclusive archaeological origin, but they are located near to a medieval village site.

Impacts: Direct, uncertain; The scatter will be crossed by the proposed pipeline, but it is not clear what the findings represent.

Recommendations: Trench evaluation in advance of construction should aim to establish the nature of the deposits associated with the findings.

Plot 40 (Figure 3, NGR 374937 228683)

A moderately dense brick and tile scatter (late C16th or later) was found in conjunction with small magnetic anomalies in 'Brick Fields' (DBA:BZ), c. 50m south of Pauntley DMV (SMR 05312.1-3). Some of the anomalies but could relate to former orchards (DBA:BT), and another cluster of anomalies in the centre of the plot could relate to an earthwork which appears to form part of the unfinished Worcester and Dean Forest Railway (SMR 09957.1).

Impacts: Direct, uncertain; The scatter and anomalies are crossed by the proposed pipeline. The remains could be related to settlement activity, or to brick production, but this is unclear.

Recommendations: Trench evaluation in advance of construction should aim to establish the nature of the deposits associated with the findings.

Plot 51 (Figure 3, NGR 372560 228840)

A moderately dense scatter of iron smelting slag (late Iron Age - early medieval) was retrieved from this plot during fieldwalking. Much of the slag was very abraded, indicating that it had been in the plough soil for some time, and that if there is an iron smelting site at this location, it is probably ploughed out. However, a relatively fresh piece could have been dislodged fairly recently from an archaeological deposit by deep ploughing. It is also possible that the fragment is modern. A larger density of slag would normally be expected if there was in fact a site at this location. Strong magnetic anomalies corresponding to areas of high susceptibility readings in Plot 51, were indicative of buried iron, or modern rubble. It was thought that the anomalies are unlikely to be archaeologically significant, but in the light of the fieldwalking findings, this view has been revised, and it is possible that the anomalies relate to an iron smelting site. Archaeological features within the plot may have been masked by the much stronger response caused by the slag (Bartlett, *pers comm.*).

Impacts: Direct, uncertain; The area is crossed by the pipeline, but the nature and significance of the archaeological remains represented by the fieldsurvey findings, is uncertain.

Recommendations: It may be appropriate for an archaeologist to casually walk the field again to establish if there is a more distinct concentration of slag along the proposed route. This could be done during the course of the trench evaluations, in order to determine whether trench evaluation is required, and if so, where the trenches would be best located.

Magnetic Anomalies

Six plots contain magnetic anomalies and/or disturbances which are of uncertain character, but of likely archaeological significance:

Plot 6 (Figure 2, NGR 380695 229016)

Localised, raised susceptibility values correspond to sparse magnetic anomalies including the remains of a possible large pit approximately 50m from the west side of the plot. The findings could be consistent with the remains of early settlement activity.

Plot 18 (Figure , NGR 379016 228196)

Areas of magnetic activity corresponded with raised susceptibility, particularly towards the east side of the field, but there were no distinct features, and their archaeological significance is uncertain.

Plot 21 (Figure 2, NGR 378055 228123)

A reasonable amount of confidence was placed in the archaeological significance of a small cluster of magnetic anomalies in conjunction with some raised susceptibility readings. However, the increase in susceptibility values could in part have been due to new cultivation which had taken place in the plot.

Plot 32 (Figure 2, NGR 376435 228167)

A cluster of small magnetic anomalies was picked up approximately 100m south of Ragman's Castle (SMR 20731.1). There was a low to moderate confidence in the archaeological interpretation of the anomalies, and they would have been disregarded had they not been located so close to the castle site.

Plot 41 (Figure 3, NGR 374261 228670)

Two to three groups of anomalies, including a linear anomaly were recorded in a plot where there was also some susceptibility variation. The linear anomaly does not accord with any former field boundaries recorded at the desk based stage of assessment, and although an agricultural building (DBA:CB) was recorded in this plot, it was some distance west of the anomaly groups (Network Archaeology Ltd. 2001)

Plot 47 (Figure 3, NGR 372948 228434)

Strong linear magnetic anomalies were interpreted with a moderate to high degree of confidence, as archaeologically significant.

Plot 52 (Figure 3, NGR 372390 229027)

Strong, but random magnetic anomalies were interpreted with a moderate to high degree of confidence in their archaeological significance.

Impacts: Direct, uncertain; All of the anomalies will be crossed by the proposed pipeline. Although the anomalies are believed to be of archaeological significance, their nature and significance is not fully known.

Recommendations: Targeted trench evaluation in advance of construction should aim to establish the nature, significance and if possible, age of the deposits represented by the geophysical anomalies.

Four parish boundaries are crossed by the proposed pipeline, including one which is crossed twice, and two which are represented by stream courses:

Plot 42/43 (Figure 3, NGR 373900 228620)

Pauntley and Newent parish boundary is marked at this point by a small ditch and hedge.

Plot 52/53 (Figure 3, NGR 372420 229120)

Pauntley and Newent parish boundary is marked at this point by a hedge.

Plot 58/59 (Figure 3, NGR 371400 229570)

Pauntley and Dymock parish boundary is marked at this point by scrub and thorns growing beside a post and wire fence.

Impacts: Direct, minor: The proposed pipeline will affect a relatively small cross section of each parish boundary.

Recommendations: The working width should be minimised, and a cross section of each boundary should be recorded during an archaeological watching brief. Where the boundaries represented by earthworks, they should be carefully reinstated when construction is complete.

Two parish boundaries on stream courses are crossed by the proposed pipeline:

Plot 20/21 (Figure 2, NGR 378200 228120)

Corse/Staunton parish boundary (DBA:AZ) lies on the course of the Glynch Brook, and is bounded by two hedges.

Plot 32/33 (Figure 2, NGR 376280 228240)

Staunton/Upleadon parish boundary (DBA:BO) lies on the course of the River Leadon, and is bounded by two hedges.

Impacts: Direct, minor; A relatively small cross section of each boundary will be crossed.

Recommendations: The working width should be minimised, and detailed monitoring should take place during the course of a watching brief. As there is the possibility of finding preserved, waterlogged deposits and deposits of paleoenvironmental potential, provision should be made for samples to be taken for analysis.

7.5.2 Category E Sites

Plot 28-29 (Figure 2, NGR 376890 228080)

A slight earthwork of a linear ditch, possibly part of an enclosure, was observed towards the west end of plot 28, extending across the east side of plot 29. However, there was no corresponding survey response except for a possible slight localised increase in susceptibility readings and some probably non-archaeological magnetic readings near the field boundary. The earthwork may therefore be natural or agricultural rather than settlement related.

Impacts: Direct, uncertain; Although the earthwork is directly crossed by the proposed pipeline, its full nature and significance are unknown.

Recommendations: Detailed monitoring during a watching brief of topsoil stripping and pipe trench excavation, should aim to establish and record the archaeological significance of the earthwork.

Finds:

Plot 7 (Figure 1, NGR 380475 228860)

Plot 8 (Figure 1, NGR 380350 228845)

A few fragments of possible daub retrieved during fieldwalking were similar to material found at Hereford in Mid Anglo-Saxon contexts, which was interpreted as the remnants of an artefact type used in the area before the introduction of pottery.

Impacts: Direct, uncertain; The scatters are crossed by the proposed pipeline. Mid Anglo-Saxon sites are almost impossible to detect through fieldwalking because of the lack of distinctive artefacts. Therefore, although little material was obtained in Plots 7 and 8, a site of this period could be located in or close to the plots. The geophysical survey results in plots 7 and 8 were blank, so it is unlikely that a settlement site is present at this location.

Recommendations: Detailed monitoring during the course of a watching brief, should establish whether there are any minor deposits relating to Mid Anglo-Saxon settlement activity.

Plot 36 (Figure 2, NGR 375731 228236)

One piece of tap slag from field with low ground visibility may indicate nearby iron production in Iron Age or Medieval period. A single, isolated geophysical anomaly indicates that such production is unlikely to have taken place within the area crossed by the proposed pipeline.

Impacts: Uncertain; It is not possible to determine the significance of the find at this stage.

Recommendations: Geophysical Survey conducted in advance of topsoil stripping should aim to establish if there are any further deposits, which could be associated with Iron Age or medieval iron production. Provision should be made for further work in advance of construction, if required.

Plot 55(Figure 3, NGR 372044 229355)

Four pieces of tap slag indicate nearby iron production in Iron Age or Medieval period, but this was not corroborated by the geophysical survey.

Impacts: Direct, uncertain; The scatter, although crossed by the pipeline, is felt to be of low archaeological significance.

Recommendations: Detailed monitoring during a watching brief should confirm its nature and significance.

Seven Groups of magnetic anomalies of uncertain significance will be crossed by the proposed route:

Plot 39(Figure 3, NGR 375179 228434)

A group of weak magnetic anomalies in 'Brick Fields' (DBA:BZ)

Plot 46-48 (Figure 3, NGR 372948 228434)

Strong, but very random magnetic anomalies could be natural

Plot 52 (Figure 3, NGR 372390 229027)

Strong, but random magnetic anomalies could be of natural origin.

Plot 54 (Figure 3, NGR 372293 229271)

Random magnetic anomalies could be natural.

Plot 56 (Figure 3, NGR 371791 229427)

Random magnetic anomalies could be natural.

Plot 58 (Figure 3, NGR 371482 229555)

Random magnetic anomalies could be natural.

Plot 68 (Figure 3, NGR 369982 230417)

Random magnetic anomalies could be natural.

Impacts: Direct, uncertain; The magnetic noise detected by the geophysical survey is not of definite or clear archaeological significance.

Recommendations: Detailed monitoring during a watching brief should establish the nature and significance of the deposits.

Two former ponds or quarry pits are crossed by the proposed pipeline route:

Plot 69 (Figure 3, NGR 377406 228053)

A sub-circular depression could be a former pond/pit

Plot 71 (Figure 3, NGR 377187 227880)

A sub-circular, wet hollow could be the remains of a pond.

Impacts: Direct, uncertain;

Recommendations: The possible former ponds/pits are felt to be of low archaeological significance. Detailed monitoring and recording during a watching brief should establish their nature, significance and possibly age.

The proposed pipe route crosses former field boundaries in two plots:

Plot 71 (Figure 3, NGR 377187 227880)

A line of mature oak trees represents a former field boundary, which was flagged up by the archaeological desk based assessment (Network Archaeology Ltd. 2001).

Plot 72 (Figure 3, NGR 376926 227855)

A line of mature oak and ash trees along a linear depression represents former field boundary, which was flagged up by the archaeological desk based assessment (Network Archaeology Ltd. 2001).

Direct, minor; A relatively small proportion of each of these boundaries will be affected by the proposed pipeline.

Recommendations: Investigate and record during the course of a watching brief

7.6 DESK BASED ASSESSMENT - AREAS OF ARCHAEOLOGICAL POTENTIAL (see Figures 2-3 for site locations - sites shown in brown)

Fourteen sites flagged up by desk based research (Network Archaeology Ltd., 2001), and within fields crossed by the proposed pipeline working width, were not corroborated by field reconnaissance, fieldwalking or geophysical surveys.

Recommendations: Detailed monitoring and recording should be undertaken on all sites during an archaeological watching brief. The former Hereford and Gloucester Canal (SMR 05303.1) has been superseded by a c. 2m wide field boundary ditch, with a hedge on one side. This boundary should be carefully monitored and recorded during the course of an archaeological watching brief. In addition, two C grade sites (DBA:AE - plot 23 and SMR 04418.1/2 - plot 46) should be considered for trench evaluation in advance of construction.

Table 4: Summary of Uncorroborated Desk Based Assessment sites

Reference	Figure no.	Plot number	National Grid Reference	Description
DBA:AJ	2	12/13	380040 228340	Former track
DBA:AV	2	16	379633 228138	Former orchard
DBA:AW	2	18	379016 228196	Former orchard
DBA:AE	2	23	377608 228121	Former building
DBA:BD	2	25	377250 228197	Former orchard
DBA:BU	3	42	373985 228536	Former orchard
SMR 04418.1/2	3	46	373199 228310	cropmarks

Reference	Figure no.	Plot number	National Grid Reference	Description
DBA:CE	3	50	372489 228725	Little Berrow Field
DBA:CF	3	51	372537 228904	Great Berrow Field
DBA:DC	3	65	370772 230383	Great Orchard
SMR 09543	3	66	370479 230322	Windmill Field
DBA:DE	3	66	370479 230322	Former Orchard
SMR 05303.1	3	66/67	370280 230440	Former Hereford and Gloucester Canal
DBA:DM	3	68	369982 230417	Ridge and Furrow

8 REPORT, FINDS AND ARCHIVE DEPOSITION

In addition to client copies, this report will also be forwarded to Gloucestershire County Council. A formal request will be made to the relevant landowners to consider donating the artefacts recovered from the fieldwork, to the county museum. The relevant parts of the archive will be lodged with this institution in due course.

9 STATEMENT OF INDEMNITY

Every effort has been taken in the preparation and submission of this report in order to provide as complete an assessment as possible within the terms of the brief, and all statements and opinions are offered in good faith. Network Archaeology Ltd cannot accept responsibility for errors of fact or opinion resulting from data supplied by any third party, or for any loss or other consequences arising from decisions or actions made upon the basis of facts or opinions expressed in this report and any supplementary papers, howsoever such facts and opinions may have been derived, or as a result of unforeseen and undiscovered sites or artefacts.

10 ACKNOWLEDGEMENTS

Network Archaeology Ltd would like to thank:

- James Twohig *Mouchel Consulting Ltd.*
- Charles Parry *Gloucestershire County Council*
- Jonathan Young *Woolley and Wallis*

11 REFERENCES

Bartlett-Clark Consultancy, 2001. *Tirley to Dymock Proposed Gas Supply Pipeline Survey: Report on Archaeogeophysical Survey*. Unpublished client report

DoE, 1997. *The Hedgerow Regulations 1997*

Network Archaeology Ltd, 2001. *Tirley to Dymock Proposed Gas Pipeline Archaeological Desk-Based Assessment*. Unpublished client report for Transco.

© Network Archaeology Ltd 2001

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means - electronic, mechanical, photocopying, recording or otherwise - unless the permission of the publisher has been given beforehand.

APPENDICES

Appendix A	Explanation of Phased Approach to Mitigation Measures
Appendix B	List of Abbreviations
Appendix C	Gazetteer of Plot Data
Appendix D	Table of Finds
Appendix E	Specialist Reports
Appendix F	Summary Table of Fieldwalking, Reconnaissance and Geophysical Survey Results
Appendix G	Figures 1 - 19

Appendix A

EXPLANATION OF PHASED APPROACH TO MITIGATION

TRANSCO'S PHASE OF WORK	CORRESPONDING ARCHAEOLOGICAL STAGES
<i>feasibility assessment</i>	<p><i>Stage 1</i> <i>feasibility study of route corridor option(s) -</i> an appraisal of archaeological potential</p>
<i>conceptual design</i>	<p><i>Stage 2</i> <i>desk-based assessment of route corridor -</i> field reconnaissance survey a thorough synthesis of available archaeological information</p>
<i>detailed design</i>	<p><i>Stage 3</i> <i>field surveys of entire preferred pipeline route -</i> field reconnaissance survey field walking geophysical survey (metal detector survey) (auger survey)</p> <p><i>Stage 4</i> <i>field evaluation of targeted areas along preferred pipeline route -</i> machine-excavated trenches hand-dug test-pits</p> <p><i>Stage 5</i> <i>excavation -</i> detailed excavation of those sites which it is not possible to avoid or desirable to preserve</p>
<i>construction</i>	<p><i>Stage 6</i> <i>watching brief -</i> permanent presence monitoring of all ground disturbing activities</p>
<i>post-construction</i>	<p><i>Stage 7</i> <i>archive and publication -</i> synthesis and dissemination of results, leading on from each of the stages outlined above</p>

Explanation of Phased Approach to Mitigation

Network Archaeology Ltd recognise seven main phases of work in the archaeological investigation of pipelines:

Stage 1 Feasibility Study

An appraisal of archaeological potential

Stage 2 Desk-based Assessment

Field Reconnaissance Survey (rapid walkover)

This involves a visual inspection of the entire length of the proposed pipeline route in order to record the following:

- location and character of unrecorded earthworks
- the level of preservation of known earthworks (eg. ridge-and-furrow)
- the occurrence of soil and vegetation changes which could indicate the presence of archaeological deposits
- land-use
- topographic variations
- visible geology
- health and Safety implications
- project specific requirements

A thorough synthesis of available information, as in this report.

Stage 3 Non-intrusive Field Survey

3a Field Reconnaissance Survey (rapid walkover)

As above for re-routes and areas which were not available for observation at the desk based stage.

3b Field walking

Field walking involves the systematic recovery of artefacts (pottery, tile, glass, slag, coins *etc.*) from the surface of ploughed fields. This exercise is intended to:

- determine the date and spatial extent of *known* sites on the proposed route which could not be avoided by route modifications.
- determine if any *known* sites lying close to the proposed route extend into it.
- locate, delimit and date previously *unknown* sites, lying in the course of the proposed route.

Field walking needs bare earth, ideally ploughed, harrowed and weathered. Late autumn and winter is the optimum time for this work.

3c Metal Detector Survey

Metal detecting can be carried out on all types of land. Ideally, detectorists with local experience are used. This exercise:

- complements field walking in arable areas.
- provides the only means of obtaining dating evidence in pasture, fen, moss and woodland areas.
- identifies and date sites that may not be archaeologically visible by field walking (eg. metal hoards, fair/trading sites, accompanied burials)

3d Earthwork survey

This work is undertaken to produce a topographic record of extant earthworks. These sites might include *known* earthworks identified by the Desk based Assessment, or previously *unknown* earthworks found during the Field Reconnaissance Survey. The sites may include settlement earthworks or agricultural earthworks (such as, ridge and furrow and lynchets).

Two methods are commonly employed; plane table survey which obtains a hachure survey, or total-station theodolite survey which produces a close contour plot.

3e Auger Survey

The retrieval of sub-surface soil samples can be used to determine the presence or absence, nature, extent and state of preservation of known or potential archaeological deposits. This may be appropriate in areas sealed by peat or alluvium, or on sensitive sites such as earthworks. Areas requiring auger survey can be identified during or shortly after the field reconnaissance and field walking surveys. This information can be crucial for determining areas suitable for geophysical survey.

3f Geophysical Survey

Geophysical survey can be used to:

- determine the character and spatial extent of *known* sites on the proposed route which can not be avoided by route modifications.
- determine if any *known* sites lying close to the proposed route extend into it.
- locate, delimit and determine the character of previously *unknown* sites lying in the course of the proposed route.

There are a number of available techniques, the most appropriate of which are *magnetometry*, *magnetic susceptibility* and *resistivity*.

Magnetometry

This technique detects local variations in the earth's magnetic field, resulting from anthropogenic changes to soil. These variations are often caused by the presence of buried archaeological deposits (eg. ditches, pits, buildings, *etc.*). This survey technique uses hand-held equipment, usually a Geoscan FM 35 Fluxgate Gradiometer.

The instrument can be used to scan large areas before focusing on smaller areas for detailed gridded survey, usually at 1m transect separation. Scanning is often used in

tandem with magnetic susceptibility (see below) to identify areas of potential for detailed survey.

Magnetometry is most suited to shallow archaeology up to c.1-1.5m below ground level. It can operate in all weathers and is not prone to seasonal effects. In general, boulder clay and alluvium tend to be poorly responsive, whilst other solid geologies and riverine gravels are relatively conducive to magnetometry, although local iron concentrations can sometimes give spurious results. It can also be affected by magnetic fields (eg. pylons). This technique is quick and cost-effective.

Magnetic susceptibility

This technique records variations of magnetic susceptibility within topsoil and subsoil. Enhanced susceptibility is often a sign of past human activity. It differs from magnetic scanning in that it locates areas of *archaeological activity* rather than discrete *features*. Magnetic susceptibility is often used in tandem with magnetic scanning to identify areas of potential for detailed survey.

Resistivity

In this method, an electric current is passed through the ground between a pair of mobile electrodes. The current passes more easily through soil which has a lower resistance (eg. ditch fills), but is impeded by buried walls and road surfaces, which have a higher resistance. Survey involves pushing a pair of electrodes into the ground along transects 1m apart. A Geoscan RM15 resistivity meter with twin electrode configuration is commonly applied. A new attachment called a 'multi-plexer', and a technique called 'resistivity profiling' allows readings to be taken from multiple levels at the same time.

Resistivity is most suited to shallow archaeology up to c.1m below ground level. The technique is slower than magnetometry and can be hampered by hard ground; ideally the probes need soft damp soil for good conductivity. Resistivity is affected by seasonal variability of groundwater. Saturated soils or soils with a high saline content are likely to produce poor results. Natural geological variations can also make interpretation difficult. This type of survey can show greater detail than magnetometry.

Stage 4 Field Evaluation

In some cases, where the results of field walking and/or geophysical survey are positive, and it is not possible or desirable to avoid a site, an evaluation can take place in advance of construction. This might involve:

- 4a *machine-excavated trenches*
- 4b *hand-dug test-pits*

By using these techniques, it should be possible to confirm the presence or absence of archaeological deposits and to determine their character, extent, date and state of preservation. The choice of technique(s) will depend upon site-specific factors.

It may be desirable to undertake evaluation of certain category B or category C sites with high archaeological potential, even if the geophysical survey has failed to locate significant anomalies. Evaluation work is usually completed well in advance of pipeline construction.

Stage 5 Area Excavation

In occasional cases where the results of evaluation are positive, and it is not possible or desirable to avoid a site, area excavation may be the most appropriate course of action, in order to record a site prior to the construction of the pipeline. Precise excavation strategies for dealing with such archaeological remains will depend on site-specific factors. It is usually preferable to preserve significant archaeological deposits (such as settlements and burials) *in-situ*, by modifying the course of the pipeline.

Stage 6 Watching Brief (during construction)

A permanent-presence watching brief takes place during the construction of the pipeline. As a minimum, this consists of archaeological monitoring of all topsoil stripping and pipeline trench excavations. Archaeological deposits identified are ideally preserved *in situ*, or can be recorded by excavation.

Stage 7 Post-Excavation (Archive, Report and Publication)

A post-excavation programme for dealing with all records of investigated archaeological remains and recovered artefacts usually follows each of the stages outlined above. This includes the collation and cataloguing of all site records, the processing, conservation and cataloguing of artefacts, the production of an archive report, and, where appropriate, the drafting of articles for publication.

Appendix B

LIST OF ABBREVIATIONS

ABBREVIATIONS

AGI	Above Ground Installation
AOD	Above Ordnance Datum
AP	Aerial Photograph
BGS	British Geological Survey
DBA	Desk Based Assessment
EH	English Heritage
GCC	Gloucestershire County Council
GSMR	Gloucestershire Sites and Monuments Record
IFA	Institute of Field Archaeologists
LDZ	Local Distribution Zone
LB	Listed Building
MON	MONARCH - National Monuments database
MPP	Monument Protection Programme
NGR	National Grid Reference
NMR	National Monuments Record
NTS	National Transmission System
OS	Ordnance Survey
SAM	Scheduled Ancient Monument
SMR	Sites and Monuments Record

Appendix C

GAZETTEER OF PLOT DATA

APPENDIX C: Tirley to Dymock - Gazetteer of Plot Data

Plot no.	Grid reference	Land use	Field condition and cover	Weather	Earthwork visibility	Ground visibility
002	SO 8127 2950	arable	ploughed	overcast		100%
003	SO 8109 2939	arable	ploughed	overcast		100%
005	SO 8083 2913	arable	ploughed	overcast		100%
006	SO 8069 2901	pasture	short cover			<25%
007	SO 8051 2881	arable	full crop			25-50%
008	SO 8033 2890	arable	full crop			25-50%
009	SO 8024 2874	arable	ploughed/harrowed	overcast		>75%
010	SO 8017 2865	arable	plough'd/harrow'd/weather'd	fine		100%
013	SO 8000 2825	pasture	short cover		good	<25%
018	SO 7901 2819	arable	stubble/stalks	overcast		50-75%
019	SO 7840 2798	arable	stubble/stalks			<25%
021	SO 7805 2812	arable	stubble/stalks			<25%
022	SO 7780 2830	arable	stubble/stalks	fine		<25%
023	SO 7760 2812	arable	stubble/stalks			<25%
024	SO 7741 2823	arable	stubble/stalks			<25%
029	SO 7681 2799	pasture	short cover		good	<25%
034	SO 7604 2825	arable	stubble/stalks	overcast		<25%
036	SO 7573 2823	arable	full crop			<25%
037	SO 7557 2833	arable	full crop			<25%
038	SO 7539 2840	arable	full crop			<25%
040	SO 7493 2868	arable	plgh'd/hrw'd/stble/stlks/crop	bright		<25%/100%
051	SO 7253 2890	pasture	short cover			<25%
053	SO 7248 2921	pasture	short cover		moderate	<25%
055	SO 7204 2935	arable	ploughed/harrowed	sunny/showers		100%
062	SO 7099 2989	arable	ploughed/harrowed	bright		100%
063	SO 7092 3010	arable	full crop			<25%
064	SO 7088 3023	arable	full crop			<25%
066	SO 7047 3032	pasture	short cover			<25%
067	SO 7016 3058	arable	ploughed/harrowed	bright/sunny		100%
068	SO 6998 3041	arable	ploughed/harrowed/full crop	bright/sunny		100%
069	SO 7740 2805	pasture	short cover	bright/sunny	good	<25%
070	SO 7727 2804	woodland	thick undergrowth	bright/sunny	poor	<25%
071	SO 7718 2787	arable	stubble/stalks	sunny/fine	good	<25%
072	SO 7692 2785	pasture	short cover	sunny/fine	good	<25%

Appendix D

GAZETTEER OF FINDS DATA

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
2	C/20	CBM	3	34	KEUP, brick, BS	116th+	381350 228163
2	D/10	Pottery	1	9	STCOAR, bowl, BS	m18th+	381364 227264
2a	A/10	Pottery	1	0	Roman, jar, SVW, BS, v. abr	Roman	381346 227288
2a	A/100	Pottery	1	21	HERA5, jar, BS, sooted ext	m16 / e 7th	381275 229197
2a	A/180	Pottery	2	31	STCOAR, bowl, recent break, BS	m18th+	381213 229335
2a	A/220	Pottery	1	8	STCOAR, bowl, BS	m18th+	381181 229367
2a	C/30	Flint	1	8	side/end scraper	?MLBA	381343 228545
2a	C/180	CBM	1	20	KEUP, brick, BS	116th+	381225 229319
2a	D/50	Pottery	1	30	STCOAR, bowl, BS	m18th+	381333 228885
2a	D/60	CTP	1	1	clay pipe	Post medieval	381325 228978
2a	E/0	CTP	1	1	clay pipe	Post medieval	381378 222800
2a	E/150	CBM	1	39	STCOAR, flat, MOD, BS	118th+	381261 229269
3	A/130	CBM	1	40	HERA10, flat, angular gravel on base - flint?, BS	116th+	381069 229271
5	A/120	CBM	1	47	STCOAR, flat, MOD, BS	118th+	380802 228446
5	B/150	CTP	1	2	CTP, clay pipe	Modern	380779 228581
5	D/30	CBM	2	14	KEUP, brick, BS	116th+	380896 226506
5	D/30	CBM	1	18	STCOAR, flat, MOD, BS	118th+	380896 226506
5	D/120	CBM	1	36	STCOAR, flat, MOD, BS	118th+	380815 228419
7	A/100	CBM	3	24	KEUP, daub	Undetermined	380466 228387
7	A/100	CBM	1	14	KEUP, flat roof tile	Post medieval	380466 228387
7	A/120	CBM	2	53	KEUP, daub	Undetermined	380451 228481
7	B/60	CBM	1	63	KEUP, flat roof tile	Post medieval	380503 228018
7	B/90	CBM	1	4	KEUP, daub	Undetermined	380480 228318
7	B/90	CBM	3	55	KEUP, brick	Post medieval	380480 228318
7	B/120	CBM	6	31	KEUP, daub	Undetermined	380457 228474
7	B/120	CBM	1	9	MISC, flat roof tile?, light coloured clay pellets	Post medieval	380457 228474
7	B/140	Pottery	1	26	HERA7D, bowl, cut marks or scratches into gl, BS	Post medieval	380442 228542
7	B/140	CBM	1	7	KEUP, brick	Post medieval	380442 228542
7	C/110	Pottery	1	4	R, SVW, v. abr, BS	Post medieval	380471 228423
7	C/110	CBM	3	25	KEUP	Undetermined	380471 228423
7	C/110	CBM	1	2	KEUP, daub	Undetermined	380471 228423
7	C/120	Pottery	1	17	TPW, cup, R	Post medieval	380463 228466

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
7	C/120	CBM	1	55	flat roof tile	Modern	380463 228466
7	C/130	Pottery	1	3	TPW, jug, polygonal vess; black ink, BS	Post medieval	380456 228503
7	D/120	CBM	1	5	KEUP	Undetermined	380470 228458
8	B/90	Pottery	1	1	TPW, cup, BS	Post medieval	380224 235504
8	C/0	Hearth bottom slag	1		FESMITH, coal fuel	Post med/mod	380314 356661
8	C/0	Smithing slag lumps	6		FESMITH, coal fuel	Post med/mod	380314 356661
8	D/40	CBM	4	260	KEUP, daub, impressions on reverse do not look like wattles; more like rounded pebbles?	Undetermined	380274 242963
8	D/50	CBM	2	96	KEUP, daub, burnt	Undetermined	380264 240379
8	D/80	CBM	2	53	KEUP, daub	Undetermined	380234 236275
8	E/20	Pottery	1	1	TPW, plate, BS	Post medieval	380294 254322
8	E/40	Flint	1	<1	heat-affected flint, reduced	Undetermined	380274 242953
8	E/120	IRON	1	3	nail	Undetermined	380194 233858
9	A/40	IRON	1	68	hexagonal nut & big washer	Modern	380257 228643
9	A/50	CBM	1	76	KEUP, flat roof tile	Post medieval	380249 228667
9	A/80	Pottery	1	1	WHITE, bowl, blue lines around rim, BS	Post medieval	380225 228705
9	B/20	Flint	1	9	tertiary flake fragment, re-corticated	?Neo/BA	380279 228528
9	B/70	Pottery	1	2	TPW, plate, spalled, BS	Post medieval	380239 228688
9	B/70	Pottery	1	4	WHITE, plate, BS	Post medieval	380239 228688
9	B/110	CBM	1	92	KEUP, brick	Post medieval	380207 228716
9	C/0	Pottery	1	4	MISC, SW, FLP, oxid, BS	Post medieval	380301 227560
9	C/0	Pottery	1	1	TPW, plate, spalled, BS	Post medieval	380301 227560
9	C/40	Pottery	1	15	STCOAR, bowl, BS	m18th+	380269 228627
9	C/60	CBM	1	26	flat roof tile	Modern	380253 228668
9	C/80	PMGL	1	5	PMGL, glass bottle, tall form;1760+	Modern	380237 228689
9	C/80	CBM	1	101	flat roof tile	Modern	380237 228689
9	C/80	Pottery	1	7	STCOAR, bowl, spalled, BS	Post medieval	380237 228689
9	C/80	Pottery	1	45	ENGS, SJ, Bristol glazed ext; cylindrical body, BS	Post medieval	380237 228689
9	C/100	CBM	2	177	flat roof tile	Modern	380221 228703
9	C/110	Pottery	1	5	HERA7D, bowl, BS	116th / m17th	380213 228708
9	D/40	CBM	1	5	KEUP, drain	Post medieval	380275 228619
9	D/40	Pottery	1	6	Roman, jar, SVW, BS	Roman	380275 228619
9	D/70	Pottery	1	3	HERA7D, bowl, BS	116th / m17th	380251 228672

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
9	E/0	CBM	1	182	HERA10, brick, BS	116th+	380313 227544
9	E/60	CBM	1	26	KEUP, brick, very calc fabric	Post medieval	380265 228652
9	E/60	CBM	1	20	KEUP, flat roof tile	Post medieval	380265 228652
9	E/100	Pottery	1	8	IA MALV, jar, BS, not too badly abraded, i.e. from feature?	Iron Age	380233 228687
9	E/120	Pottery	1	2	TPW, plate, spalled, BS	Post medieval	380217 228696
10	B/0	CBM	1	37	KEUP, brick, BS	116th+	380210 226065
10	B/70	CTP	1	1	clay pipe	Modern	380175 228525
10	C/80	CTP	1	1	clay pipe	Modern	380179 228541
10	D/20	CBM	1	90	HERA10, brick, BS	116th+	380217 228164
18	A/0	CBM	1	15	KEUP, brick, BS	116th+	379325 226991
18	A/50	CBM	1	7	KEUP, brick, BS	116th+	379275 228045
18	A/80	Pottery	1	13	STCOAR, bowl, BS	m18th+	379245 228082
18	A/180	CBM	14	119	KEUP, brick, BS	116th+	379145 228119
18	A/190	CBM	7	76	HERA10, brick, BS	116th+	379135 228120
18	A/240	Pottery	1	35	HERA7E, bowl, BS	117th / m18th	379085 228126
18	A/270	CBM	1	43	STCOAR, flat, MOD, BS	118th+	379055 228129
18	A/270	Pottery	1	17	TPW, egg cup, BS	19th+	379055 228129
18	A/430	CBM	1	65	STCOAR, flat, MOD, BS	118th+	378895 228137
18	A/440	CBM	1	8	COLEFORD?, chimney, BS, sooted int and ext	118/19th+	378885 228137
18	B/20	CBM	1	36	KEUP, brick, BS	116th+	379305 227908
18	B/60	CBM	1	7	KEUP, brick, BS	116th+	379265 228051
18	B/90	Pottery	1	11	STCOAR, bowl, BS	m18th+	379235 228079
18	B/180	CBM	4	11	KEUP, brick, BS	116th+	379145 228109
18	B/180	Pottery	1	3	HERB4, jug, BS	114th / m16th	379145 228109
18	B/190	CBM	1	18	KEUP, brick, BS	116th+	379135 228110
18	B/190	Pottery	1	7	TPW, bowl, BS	19th+	379135 228110
18	B/240	Pottery	1	3	STCOAR, jar, BS	m18th+	379085 228116
18	B/250	CTP	1	1	clay pipe	Modern	379075 228117
18	B/270	CBM	1	5	HERA10, pantile, BS	116th+	379055 228119
18	B/280	CBM	1	11	KEUP, brick, BS	116th+	379045 228120
18	B/280	CBM	1	30	STCOAR flat SST and white clay pellets BS	118th+	379045 228120
18	B/280	Pottery	1	3	PEAR, bowl, BS	118th+	379045 228120

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
18	B/290	CTP	1	1	clay pipe	Modern	379035 228120
18	B/350	Pottery	1	4	TPW, BS	19th+	378975 228124
18	B/440	CBM	1	29	KEUP+CALC, chimney, calc gravel temper, BS	116th+	378885 228127
18	B/450	CBM	1	3	KEUP+CALC, calc gravel temper, BS	116th+	378875 228127
18	B/600	Pottery	1	3	TPW, CLSD, BS	19th+	378725 228130
18	B/600	Pottery	1	3	TPW, plate, BS	19th+	378725 228130
18	B/640	Pottery	1	9	STSL, POSS, brown slipped ext, B	117th / e18th	378685 228131
18	C/10	CBM	1	16	HERA10, brick, BS	116th+	379315 227744
18	C/10	CBM	8	69	KEUP, brick, BS	116th+	379315 227744
18	C/30	Pottery	1	6	WHITE, jug, sponged, BS	19th+	379295 227964
18	C/250	Pottery	1	19	STBRS, tank, B	117th / e18th	379075 228107
18	C/270	CTP	2	4	clay pipe	Post medieval	379055 228109
18	C/270	CBM	2	13	KEUP, brick, BS	116th+	379055 228109
18	C/430	Pottery	1	7	DERBS?, jar, BS	m19th+	378895 228117
18	C/440	CBM	1	10	KEUP+CALC, chimney, calc gravel temper, BS	116th+	378885 228117
18	C/500	Pottery	1	3	HERB4, jar, BS	114th / m16th	378825 228119
18	C/650	Pottery	1	29	HERA5, PANC, BS	m16 / e17th	378675 228121
18	C/650	CTP	1	2	clay pipe	Modern	378675 228121
18	C/650	Pottery	2	13	TPW, plate, BS	19th+	378675 228121
18	C/650	Pottery	1	1	TPW, plate, BS	19th+	378675 228121
18	C/660	CBM	1	34	HERA10, pantile, BS	116th+	378665 228121
18	D/80	CBM	1	19	HERA10, brick, BS	116th+	379245 228052
18	D/260	Pottery	1	19	TPW, bowl, BS	19th+	379065 228098
18	D/630	Pottery	2	9	CREA, plate, BS	118/19th+	378695 228111
18	D/630	CTP	1	1	clay pipe, C17th	Post medieval	378695 228111
18	D/650	CBM	1	6	HERA10, pantile, BS	116th+	378675 228111
18	D/650	Pottery	1	9	TPW, plate, BS	19th+	378675 228111
18	D/650	CBM	1	14	HERA10, pantile, BS	116th+	378675 228111
18	D/650	Pottery	1	3	WHITE, jar, BS	19th+	378675 228111
18	D/650	Pottery	1	3	TPW, plate, BS,	19th+	378675 228111
18	D/650	Pottery	1	12	HERA7E, bowl, R	117th / m18th	378675 228111
18	D/660	Pottery	1	4	TPW, bowl, R	19th+	378665 228111

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
18	D/660	CBM	1	7	HERA10, pantile, BS	116th+	378665 228111
18	E/30	CBM	3	15	KEUP, brick, BS	116th+	379295 227944
18	E/500	Flint	1	4	secondary flake/blade, ?utilised	prehistoric	378825 228099
18	E/650	Pottery	1	7	HERB1, jar, C13th rim type, R, v. abr	13th	378675 228101
18	E/650	CBM	1	48	HERA10, pantile, reduced, BS	116th+	378675 228101
18	E/650	CBM	2	49	HERA10, pantile, reduced, BS	116th+	378675 228101
18	E/660	CTP	1	2	clay pipe	Modern	378665 228101
18	E/660	CBM	1	20	HERA10, pantile, reduced, BS	116th+	378665 228101
18	E/660	CBM	3	52	HERA10, pantile, BS	116th+	378665 228101
19	A/40	CBM	1	1	KEUP	Undetermined	378613 227558
19	A/40	CBM	1	27	flat roof tile	Modern	378613 227558
19	A/60	CBM	4	33	KEUP, daub	Undetermined	378594 227735
19	A/70	CBM	1	21	KEUP, flat roof tile	Post medieval	378584 227789
19	A/150	CBM	1	24	flat roof tile	Modern	378508 227967
19	A/180	Slag	2	4	FESMITH	Undetermined	378480 227995
19	A/180	CBM	1	1	MISC, light firing inclusionless clay	Post medieval	378480 227995
19	A/270	CBM	1	7	flat roof tile	Modern	378394 228041
19	A/320	Pottery	1	1	TPW, plate, BS	Post medieval	378346 228055
19	A/370	Pottery	1	2	HERB4, BS	Post medieval	378299 228066
19	A/370	CBM	1	2	HERB4	Med/Post med	378299 228066
19	B/90	Pottery	1	1	MISC, FLP, BS	Post medieval	378568 227852
19	B/180	Pottery	1	1	SWSG, BS	Post medieval	378483 227985
19	B/180	Pottery	1	1	TPW, plate, BS	Post medieval	378483 227985
19	B/250	CBM	1	18	KEUP, brick	Post medieval	378416 228024
19	B/260	Pottery	2	2	CREA, bowl, BS	Post medieval	378407 228027
19	B/260	Pottery	1	19	HERA7D, overfired, bowl, black int gl, BS	Post medieval	378407 228027
19	B/290	CBM	1	9	KEUP, daub	Undetermined	378378 228037
19	B/290	Pottery	1	1	TPW, plate, BS	Post medieval	378378 228037
19	B/360	Pottery	1	2	GCP1, bowl, BS	Post medieval	378311 228054
19	B/360	Pottery	1	2	TPW, cup, BS	Post medieval	378311 228054
19	C/10	Pottery	1	1	TPW, plate, BS	Post medieval	378648 226384
19	C/30	Pottery	1	43	GCP1, bowl, KC base, BS	Post medieval	378629 227374

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
19	C/40	CBM	1	30	KEUP, flat roof tile	Post medieval	378619 227539
19	C/60	Pottery	1	47	AK, bowl, BS	Post medieval	378600 227716
19	C/60	PLASTER	1	1	PLASTER, quartz sand aggregate	Modern	378600 227716
19	C/80	CBM	1	23	flat roof tile	Modern	378581 227810
19	C/100	CBM	1	76	KEUP, flat roof tile	Post medieval	378562 227869
19	C/100	CBM	2	89	flat roof tile	Modern	378562 227869
19	C/120	CBM	1	20	brick	Modern	378543 227908
19	C/120	CBM	1	10	KEUP, flat roof tile	Post medieval	378543 227908
19	C/120	CBM	1	121	KEUP, brick	Post medieval	378543 227908
19	C/120	CONCRETE	1	31		Modern	378543 227908
19	C/120	Pottery	1	18	STCOAR, bowl, BS	Post medieval	378543 227908
19	C/120	CBM	1	41	flat roof tile	Modern	378543 227908
19	C/140	CBM	1	36	flat roof tile	Modern	378524 227937
19	C/180	CBM	2	142	flat roof tile	Modern	378486 227976
19	C/180	Pottery	1	34	STCOAR, bowl, glazed int & ext, BS	Post medieval	378486 227976
19	C/180	Pottery	1	26	HERA7D, bowl, BS	Post medieval	378486 227976
19	C/200	CBM	1	36	fire brick or similar?	Modern	378467 227989
19	C/220	CBM	1	55	KEUP, brick	Post medieval	378448 228001
19	C/220	Pottery	1	1	WHITE, BS	Post medieval	378448 228001
19	C/250	Pottery	1	28	STCO, dish, EM C18th, BS	Post medieval	378419 228014
19	C/260	Pottery	1	16	FREC, BEL, BS	Post medieval	378410 228018
19	C/280	CBM	2	47	KEUP, brick, vitrified core	Post medieval	378391 228025
19	C/310	Pottery	1	11	GCP1, bowl, spalled, BS	Post medieval	378362 228034
19	C/310	CBM	1	7	KEUP	Undetermined	378362 228034
19	C/310	CBM	1	15	KEUP, brick, vitrified	Post medieval	378362 228034
19	C/310	CBM	1	7	KEUP, brick	Post medieval	378362 228034
19	C/340	CBM	1	9	KEUP, brick	Post medieval	378333 228041
19	C/340	CBM	2	60	flat roof tile	Modern	378333 228041
19	C/370	Pottery	1	4	CSTN, cup, BS	Post medieval	378305 228047
19	C/370	CBM	1	16	KEUP, flat roof tile	Post medieval	378305 228047
19	C/370	Pottery	1	2	STCOAR, bowl, BS	Post medieval	378305 228047
19	D/10	CBM	1	14	KEUP, flat roof tile	Post medieval	378651 226375

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
19	D/40	CBM	1	33	flat roof tile	Modern	378622 227529
19	D/110	CBM	1	33	flat roof tile	Modern	378556 227881
19	D/120	CBM	1	24	flat roof tile	Modern	378546 227899
19	D/160	Pottery	1	18	HERA7D, bowl, BS	Post medieval	378508 227949
19	D/190	Pottery	1	1	TPW, late, spalled, BS	Post medieval	378479 227973
19	D/190	CBM	1	49	KEUP, brick	Post medieval	378479 227973
19	D/190	CBM	1	71	flat roof tile, nibbed	Modern	378479 227973
19	D/190	CBM	1	7	KEUP, drain, extruded	Post medieval	378479 227973
19	D/250	CBM	1	13	KEUP, brick	Post medieval	378422 228005
19	D/250	CBM	1	22	flat roof tile	Modern	378422 228005
19	D/250	Pottery	1	67	GLOS110, jug, DR, strap handle with 6 slashes, R	Post medieval	378422 228005
19	D/270	Slag	1	5	FESMITH Coal fuel.	Undetermined	378403 228012
19	D/270	CBM	1	3	KEUP, flat roof tile	Post medieval	378403 228012
19	D/270	CBM	1	38	flat roof tile	Modern	378403 228012
19	D/280	CONCRETE	1	18		Modern	378394 228015
19	D/280	CBM	1	160	KEUP, brick	Post medieval	378394 228015
19	D/280	CBM	1	66	KEUP, flat roof tile	Post medieval	378394 228015
19	D/280	CBM	2	18	KEUP, brick	Post medieval	378394 228015
19	D/320	Pottery	1	1	NOTS, tank, BS	Post medieval	378356 228027
19	D/320	CBM	1	18	KEUP, brick	Post medieval	378356 228027
19	D/320	Pottery	1	13	AK, bowl, BS	Post medieval	378356 228027
19	D/330	CBM	1	33	KEUP, brick, vitrified	Post medieval	378346 228029
19	E/0	CBM	1	14	KEUP, flat roof tile	Post medieval	378663 222901
19	E/310	CBM	1	35	KEUP, flat roof tile	Post medieval	378368 228014
19	E/320	CBM	1	9	KEUP, brick	Post medieval	378359 228017
20		CBM	1	12	HERB5, brick, BS	m16/e17th	#VALUE!
20		CTP	1	1	clay pipe	Post medieval	377703 228269
20		CBM	1	72	HERA10, brick, BS	116th+	377703 228269
20		CBM	1	57	HERB5, brick, BS	m16/e17th	377703 228269
20		CBM	1	43	HERB5, brick, BS	m16/e17th	377869 228296
20		CBM	6	28	KEUP, brick, BS	116th+	377869 228296
21		Pottery	1	10	Roman, WM jar, SVW, BS	Roman	378013 222246

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
21	A/100	CBM	2	48	KEUP, flat roof tile, frost shattered	Post medieval	378118 228475
21	A/260	CBM	1	7	KEUP, brick	Post medieval	377979 228276
21	B/100	Pottery	1	3	R, SVW, abr, BS	Post medieval	378113 228466
21	B/100	CBM	2	3	KEUP	Undetermined	378113 228466
21	C/21	Pottery	1	2	R, SVW, v. abr and coated with dark concretion, BS	Post medieval	378177 229458
21	C/40	CBM	1	3	KEUP, brick	Post medieval	378161 228896
21	C/60	Pottery	1	2	CBM, flat?, BS	Post medieval	378143 228660
21	C/60	CBM	1	3	HERA10, daub	Undetermined	378143 228660
21	C/60	CBM	1	2	CBM, flat roof tile?	Post medieval	378143 228660
21	C/60	CBM	1	36	KEUP, flat roof tile	Post medieval	378143 228660
21	C/80	CBM	1	12	KEUP, flat roof tile	Post medieval	378126 228535
21	C/80	Pottery	1	4	SVW, v. abr, BS	Post medieval	378126 228535
21	C/80	CBM	1	15	KEUP, drain	Post medieval	378126 228535
21	C/80	CBM	3	10	HERB4, v. abr	Med/Post med	378126 228535
21	C/80	Pottery	3	10	HERB4, v. abr; ID?, BS	Post medieval	378126 228535
21	C/80	Pottery	1	11	R, SVW, groove around inside of base; v. abr, BS	Post medieval	378126 228535
21	C/80	CBM	2	48	flat roof tile	Modern	378126 228535
21	C/100	CBM	1	40	flat roof tile	Modern	378108 228457
21	C/110	CBM	1	13	KEUP, flat roof tile	Post medieval	378100 228429
21	C/120	Pottery	1	6	R, SVW, abr, BS	Post medieval	378091 228405
21	C/140	CBM	1	37	KEUP, brick	Post medieval	378074 228366
21	C/140	CBM	1	109	HERB4, ridge tile	Med/Post med	378074 228366
21	C/220	CBM	1	29	KEUP, flat roof tile	Post medieval	378004 228282
21	C/250	CBM	1	6	brick	Modern	377978 228264
21	C/250	Slag	2	12	very glassy; coal fuel; pmed/modern; (if same source as D240 not blast furnace slag); swe	Post med/mod	377978 228264
21	C/260	Slag	3		very glassy; coal fuel; pmed/modern; (if same source as D240 not blast furnace slag); swe	Post med/mod	377969 228258
21	C/260	Hearth bottom slag	1		FESMITH, very abraded; large and dense; charcoal fuel; just possibly a fragment of LIA c	Undetermined	377969 228258
21	C/260	CBM	2	180	KEUP, brick, vitrified core	Post medieval	377969 228258
21	D/100	CBM	2	76	KEUP, brick	Post medieval	378104 228449
21	D/140	CBM	1	30	flat roof tile	Modern	378069 228358
21	D/140	CBM	9	293	KEUP, flat roof tile - ?just one tile	Post medieval	378069 228358
21	D/240	Slag	1	3	very glassy; coal fuel; (not blast furnace slag); sweetings?	Post med/mod	377981 228260

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
21	D/240	CBM	2	33	KEUP, brick	Post medieval	377981 228260
21	D/250	CBM	1	1	CBM, drain	Post medieval	377973 228255
21	D/250	Pottery	1	1	CBM, drain, BS	Post medieval	377973 228255
21	D/250	CBM	1	59	flat roof tile	Modern	377973 228255
21	E/70	CBM	1	88	brick, v. sandy, frogged	Modern	378125 228572
21	E/110	CBM	1	22	HERB4, Ridge tile?	Med/Post med	378090 228411
21	E/190	CBM	1	16	HERB4, flat roof tile, only SST frags visible so not certain	Post medieval	378020 228288
21	E/250	CBM	1	5	CBM, brick, v. abr	Post medieval	377968 228246
21	E/250	Pottery	1	7	HERB5, bowl, abr, BS	Post medieval	377968 228246
21	E/250	Pottery	1	5	CBM, brick, v. abr, BS	Post medieval	377968 228246
21	E/250	Pottery	1	5	R, SVW, abr, BS	Post medieval	377968 228246
23	C/10	CBM	2	52	KEUP, flat roof tile	Post medieval	377626 227833
36		Pottery	1	3	Roman, jar, grey SVW, BS	Roman	375798 228393
36		Tap slag	1	81	FESMELT, abraded; dense; moulded side height 30mm	Undetermined	375846 228403
36	A/90	LEAD	1	9	buckle, D-Shaped	Post medieval	378734 230799
36	B/30	CBM	1	123	brick	Modern	378793 235162
36	B/50	CBM	1	199	KEUP, brick, vitrified core	Post medieval	378773 232644
36	B/150	CBM	2	24	KEUP, brick	Post medieval	378673 229802
36	B/160	CBM	1	111	flat roof tile	Modern	378663 229707
36	B/170	CBM	1	8	flat roof tile	Modern	378653 229623
36	B/180	CBM	1	85	flat roof tile, quartz sand aggregate	Modern	378643 229548
36	B/210	CBM	1	30	KEUP, flat roof tile	Post medieval	378613 229365
36	C/20	CBM	1	57	MISC, flat roof tile	Post medieval	378803 237922
36	C/160	CBM	1	43	flat roof tile	Modern	378663 229697
36	D/40	CBM	1	26	flat roof tile	Modern	378783 233604
36	D/190	CBM	1	83	KEUP, drain	Post medieval	378633 229461
36	E/60	CBM	1	11	KEUP, brick	Post medieval	378763 231937
36	E/60	CBM	1	1	brick	Modern	378763 231937
36	E/160	ANBN	1	30	ANBN, immature pig?, knife cuts	Early modern	378663 229677
37	A/10	CBM	1	50	KEUP, flat roof tile	Post medieval	375624 228822
37	A/50	CBM	1	32	flat roof tile	Modern	375587 228461
37	A/100	CBM	1	3	KEUP, flat roof tile	Post medieval	375540 228396

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
37	A/120	CBM	2	63	KEUP, flat roof tile	Post medieval	375522 228385
37	B/80	CBM	2	34	KEUP, flat roof tile	Post medieval	375555 228404
37	B/110	CBM	1	4	KEUP, flat roof tile	Post medieval	375527 228381
37	B/150	CBM	1	12	KEUP, flat roof tile	Post medieval	375490 228364
37	C/10	Flint	1	2	blade fragment	Mesolithic	375616 228803
37	C/100	CBM	2	9	KEUP, flat roof tile	Post medieval	375533 228378
37	C/120	CBM	3	125	KEUP, flat roof tile	Post medieval	375514 228367
37	D/70	CBM	1	25	KEUP, flat roof tile	Post medieval	375557 228397
37	D/80	CBM	3	18	KEUP, flat roof tile	Post medieval	375548 228385
37	D/140	CBM	1	7	KEUP, flat roof tile	Post medieval	375492 228349
37	D/140	CBM	1	15	flat roof tile	Modern	375492 228349
37	E/70	CBM	2	64	KEUP, flat roof tile	Post medieval	375553 228388
38	A/70	CBM	2	5	KEUP, flat roof tile	Post medieval	370555 232168
38	A/80	CBM	2	6	KEUP	Undetermined	370565 231718
38	A/170	CBM	1	7	KEUP, flat roof tile	Post medieval	370655 229986
38	A/180	CBM	1	43	KEUP, flat roof tile, square peg hole	Post medieval	370665 229897
38	B/10	CBM	1	42	KEUP, flat roof tile	Post medieval	370495 247453
38	B/80	CBM	4	253	KEUP, flat roof tile	Post medieval	370565 231728
38	B/90	CBM	1	10	KEUP, brick	Post medieval	370575 231374
38	B/100	CBM	1	14	HERB4, ridge tile	Med/Post med	370585 231087
38	B/120	CBM	3	13	KEUP, daub	Undetermined	370605 230650
38	B/120	CBM	1	46	KEUP, drain, extruded	Post medieval	370605 230650
38	C/60	CBM	1	9	KEUP, flat roof tile	Post medieval	370545 232775
38	C/60	Pottery	1	2	SELZ, bot, OR Derbs Black - leading bottle, BS	Post medieval	370545 232775
38	C/60	CBM	1	49	flat roof tile	Modern	370545 232775
38	C/90	CBM	1	31	KEUP, flat roof tile	Post medieval	370575 231384
38	C/100	CBM	2	61	KEUP, flat roof tile	Post medieval	370585 231097
38	C/120	CBM	1	5	KEUP, brick	Post medieval	370605 230660
38	C/150	Pottery	1	2	R, SVW, v. abr, BS	Post medieval	370635 230217
38	D/50	CBM	1	18	KEUP, flat roof tile, v. abr	Post medieval	370535 233586
38	D/160	CBM	1	29	KEUP, daub	Undetermined	370645 230115
38	E/90	CBM	1	18	KEUP, flat roof tile	Post medieval	370575 231404

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
38	E/170	CBM	1	13	KEUP, flat roof tile	Post medieval	370655 230026
38	E/170	CBM	1	13	KEUP, flat roof tile	Post medieval	370655 230026
40	A/0	CBM	1	32	HERB4, flat roof tile	Post medieval	375148 234121
40	A/0	CBM	3	18	KEUP, MOD	Undetermined	375148 234121
40	A/10	CBM	2	69	KEUP, flat, square peg hole, BS	116th+	375138 230472
40	A/30	CBM	1	14	KEUP, brick	Post medieval	375119 229430
40	A/60	CBM	1	21	KEUP, pantile, vitrified core, grass impressions	Post medieval	375089 229069
40	A/90	CBM	1	7	KEUP, light coloured	Undetermined	375059 228936
40	A/100	Pottery	1	3	TPW, late, abr, BS	Post medieval	375049 228908
40	A/120	CTP	1	1	clay pipe	Modern	375030 228867
40	A/160	CBM	1	82	KEUP, brick, vitrified	Post medieval	374990 228814
40	A/160	CBM	1	41	KEUP, flat roof tile, light coloured variegated	Post medieval	374990 228814
40	A/200	CBM	4	199	KEUP, brick, BS	116th+	374951 228781
40	A/270	CBM	1	231	KEUP, brick, BS	116th+	374881 228747
40	B/20	CTP	1	4	clay pipe	Post medieval	375127 229733
40	B/20	CBM	2	15	KEUP, flat roof tile	Post medieval	375127 229733
40	B/30	CBM	1	22	KEUP, flat roof tile	Post medieval	375117 229420
40	B/30	Pottery	1	1	HERB4, jug, v. abr; ID?, BS	Post medieval	375117 229420
40	B/40	CBM	1	69	KEUP, flat, BS	116th+	375107 229246
40	B/60	CBM	2	16	KEUP, flat roof tile	Post medieval	375087 229059
40	B/60	CBM	1	96	HERB4, flat roof tile	Post medieval	375087 229059
40	B/90	CBM	1	1	CBM, v. abr	Undetermined	375058 228926
40	B/90	Pottery	1	1	CBM, v. abr, BS	Post medieval	375058 228926
40	B/90	Pottery	1	9	HERA7D, bowl, abr, BS	Post medieval	375058 228926
40	B/310	Hearth bottom slag	1	109	FESMITH, abraded; encrusted; dense	Undetermined	374840 228725
40	C/10	Flint	1	12	?core fragment or naturally fractured flint	?LN/BA	375135 230453
40	C/40	CBM	2	109	KEUP, flat roof tile	Post medieval	375106 229236
40	C/40	CBM	1	69	KEUP, brick	Post medieval	375106 229236
40	C/50	CBM	3	53	KEUP, flat roof tile	Post medieval	375096 229126
40	C/50	CBM	1	59	KEUP, brick	Post medieval	375096 229126
40	C/50	CBM	1	46	flat roof tile	Modern	375096 229126
40	C/60	CBM	1	9	HERB4, flat roof tile	Post medieval	375086 229049

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
40	C/60	CBM	5	68	KEUP, flat roof tile	Post medieval	375086 229049
40	C/70	CBM	1	58	KEUP, flat roof tile	Post medieval	375076 228993
40	C/70	IRON	1	2	nail	Undetermined	375076 228993
40	C/80	Pottery	1	20	HERB4, ridge, abr, BS	Post medieval	375066 228950
40	C/80	CBM	1	37	HERB4, flat roof tile	Post medieval	375066 228950
40	C/80	CBM	1	20	HERB4, ridge tile, abr square peg hole	Med/Post med	375066 228950
40	C/90	CBM	1	10	flat roof tile	Modern	375056 228916
40	C/90	CBM	2	124	KEUP, brick	Post medieval	375056 228916
40	C/90	CBM	1	25	HERB4, flat roof tile	Post medieval	375056 228916
40	C/90	Pottery	1	4	CBM, v. abr, BS	Post medieval	375056 228916
40	C/90	CBM	1	4	CBM, v.abr	Undetermined	375056 228916
40	C/90	CBM	3	45	KEUP, flat roof tile	Post medieval	375056 228916
40	C/110	CBM	2	19	KEUP, flat roof tile	Post medieval	375036 228866
40	C/120	CBM	3	22	KEUP, flat roof tile	Post medieval	375026 228847
40	C/120	Pottery	1	3	HERB4, jug, mottled cugl; abr, BS	Post medieval	375026 228847
40	C/120	CBM	1	17	HERB4, flat roof tile	Post medieval	375026 228847
40	C/130	Pottery	2	7	CBM, flat, abr, BS	Post medieval	375017 228831
40	C/130	CBM	3	7	KEUP, flat roof tile	Post medieval	375017 228831
40	C/130	CBM	2	7	CBM, flat roof tile, abr	Post medieval	375017 228831
40	C/140	CBM	1	18	brick	Modern	375007 228817
40	C/140	CBM	2	8	KEUP	Undetermined	375007 228817
40	C/140	CBM	1	76	brick, abundant clay pellets; black core, frogged	Modern	375007 228817
40	C/150	CBM	1	53	KEUP, flat roof tile,	Post medieval	374997 228805
40	C/150	CBM	1	3	KEUP	Undetermined	374997 228805
40	C/290	CBM	2	434	KEUP, brick, rounded quartz sand temper, BS	116th+	374859 228721
40	C/300	CBM	1	23	KEUP, flat, BS	116th+	374849 228718
40	D/20	CBM	2	26	KEUP, flat roof tile	Post medieval	375124 229713
40	D/40	CBM	1	28	HERB4, flat roof tile	Post medieval	375104 229226
40	D/60	CBM	1	35	HERB4, flat roof tile	Post medieval	375084 229039
40	D/70	PMGL	1	44	PMGL, glass bottle, tall form; 1760+	Modern	375074 228983
40	D/70	CBM	1	98	HERB4, flat roof tile	Post medieval	375074 228983
40	D/70	CBM	2	115	KEUP, flat roof tile	Post medieval	375074 228983

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
40	D/70	ANBN	1	1	ANBN, burnt	Early modern	375074 228983
40	D/80	CBM	1	11	HERB4, flat roof tile, vitrified	Post medieval	375064 228940
40	D/80	Tap slag	1	40	FESMELT, abraded; dense	Undetermined	375064 228940
40	D/80	CBM	2	38	KEUP, flat roof tile	Post medieval	375064 228940
40	D/80	CBM	1	36	flat roof tile	Modern	375064 228940
40	D/80	CBM	1	31	KEUP, brick	Post medieval	375064 228940
40	D/80	Pottery	1	5	STBRS, tank, moulding like Westerwald, BS	Post medieval	375064 228940
40	D/80	CBM	1	23	KEUP, flat roof tile	Post medieval	375064 228940
40	D/110	Pottery	1	1	TPW, cup, R	Post medieval	375035 228856
40	D/110	CBM	3	35	KEUP, flat roof tile	Post medieval	375035 228856
40	D/120	Pottery	1	1	ANBN, calcined bone, BS,	Post medieval	375025 228837
40	D/120	Pottery	2	10	CBM, flat, BS	Post medieval	375025 228837
40	D/120	ANBN	1	1	ANBN, calcined bone	Early modern	375025 228837
40	D/120	CBM	5	67	KEUP, flat roof tile	Post medieval	375025 228837
40	D/120	Pottery	1	1	STMO, tank, BS	Post medieval	375025 228837
40	D/120	CBM	1	23	flat roof tile	Modern	375025 228837
40	D/120	CBM	2	10	CBM, flat roof tile, nibbed	Post medieval	375025 228837
40	D/120	Pottery	1	4	HERA7D, bowl, frost-shattered, BS	Post medieval	375025 228837
40	D/120	CBM	1	25	KEUP, flat roof tile, light coloured, abr	Post medieval	375025 228837
40	D/180	CBM	2	8	KEUP, flat roof tile	Post medieval	374966 228766
40	D/180	Pottery	1	4	WHITE, rect dish, might be a soap dish?; lustre of similar OG painted dec, B	Post medieval	374966 228766
40	D/340	CBM	1	34	KEUP, brick, BS	116th+	374808 228697
40	D/350	CBM	1	57	KEUP, flat, BS	116th+	374798 228695
40	E/10	CBM	1	38	KEUP, brick	Post medieval	375132 230433
40	E/10	CBM	3	10	KEUP	Undetermined	375132 230433
40	E/30	CBM	1	2	KEUP, pantile	Post medieval	375112 229390
40	E/30	CBM	1	21	KEUP, daub	Undetermined	375112 229390
40	E/50	CBM	2	114	KEUP, flat roof tile, round peg hole	Post medieval	375093 229106
40	E/60	CBM	1	95	KEUP, flat roof tile, vitrified core	Post medieval	375083 229029
40	E/70	Pottery	1	12	HERA7D, overfired, jar, black int glaze, BS	Post medieval	375073 228973
40	E/80	Pottery	1	1	TPW, plate, BS	Post medieval	375063 228930
40	E/80	PMGL	1	36	PMGL, glass bottle, Onion form;1680-1720	Post medieval	375063 228930

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
40	E/120	CBM	1	21	MOD, flat roof tile	Modern	375023 228827
51	A/50	Pottery	1	1	NCBW, BS	Post medieval	372536 229112
51	A/70	Flint	1	<1	heat-affected flint, oxidised	undetermined	372523 229046
51	A/80	Pottery	1	4	MISC, v. micaceous; oxid, drain, v. abr, BS	Post medieval	372516 229024
51	A/80	CBM	1	4	KEUP, brick	Post medieval	372516 229024
51	A/80	CBM	1	4	MISC, drain, v. micaceous; oxid, v. abr	Post medieval	372516 229024
51	A/80	Pottery	1	3	CREA, plate, spalled glaze, BS	Post medieval	372516 229024
51	A/80	Pottery	1	4	HERA7D, bowl, BS	Post medieval	372516 229024
51	A/100	Slag	1	7	FESMITH, coal fuel	Post med/mod	372502 228994
51	A/110	CBM	2	5	KEUP, daub	Undetermined	372495 228982
51	A/120	CBM	2	39	KEUP, brick	Post medieval	372489 228973
51	A/130	PMGL	1	13	PMGL, glass bottle, tall form 1760+	Modern	372482 228965
51	B/10	CBM	1	36	KEUP, brick	Post medieval	372556 229767
51	B/30	Pottery	1	3	CREA, plate, BS	Post medieval	372542 229247
51	B/40	Slag	1	41	FEWKING, very, very abraded; probably tap; dense	Undetermined	372536 229160
51	B/40	PMGL	2	39	waste glass	Post med/Mod	372536 229160
51	B/60	Pottery	1	2	TPW, CLSD, BS	Post medieval	372522 229067
51	B/70	Tap slag	1	7	FESMELT, abraded; dense	Undetermined	372515 229039
51	B/70	CBM	1	5	MISC, fine pipe clay with cubic voids	Post medieval	372515 229039
51	B/90	CBM	1	8	KEUP, flat roof tile	Post medieval	372502 229001
51	B/90	Tap slag	2	38	FESMELT, abraded; dense	Undetermined	372502 229001
51	B/100	CBM	4	32	KEUP, flat roof tile	Post medieval	372495 228987
51	B/100	Slag	1	2	FEWKING	Undetermined	372495 228987
51	B/100	CBM	2	66	KEUP, brick	Post medieval	372495 228987
51	B/100	Pottery	1	3	WHITE, sanitary?, BS	Post medieval	372495 228987
51	B/110	Pottery	1	1	WHITE, BS	Post medieval	372488 228976
51	B/110	Tap slag	1	3	FESMELT	Undetermined	372488 228976
51	B/110	CBM	1	47	KEUP, flat roof tile	Post medieval	372488 228976
51	B/110	Coal	1	18	slagged	Undetermined	372488 228976
51	B/120	Hearth bottom slag	1	112	FESMITH, very, very abraded	LIA / medieval	372481 228966
51	B/120	CBM	1	11	brick	Modern	372481 228966
51	B/120	Pottery	2	2	REFR, teapot?, white slipped int, BS	Post medieval	372481 228966

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
51	C/10	Tap slag	1	28	FESMELT, abraded; dense	Undetermined	372549 229760
51	C/20	Clinker	1	1		Undetermined	372542 229396
51	C/30	Tap slag	1	8	FESMELT, abraded; dense	Undetermined	372535 229240
51	C/30	Slag	1	46	FEWKING, abraded; probably FESMELT	Undetermined	372535 229240
51	C/40	Pottery	1	4	CBM, flat, BS	Post medieval	372528 229153
51	C/40	CBM	1	4	CBM, flat roof tile	Post medieval	372528 229153
51	C/40	CBM	1	8	KEUP, flat roof tile	Post medieval	372528 229153
51	C/60	Tap slag	1	11	FESMELT, very abraded; dense	Undetermined	372515 229060
51	C/60	CBM	1	43	KEUP, flat roof tile	Post medieval	372515 229060
51	C/60	Channel/finger slag	1	44	FESMELT, fresh, many voids, condition surprisingly good.	Undetermined	372515 229060
51	C/70	Pottery	1	9	STCOAR, bowl, BS	Post medieval	372508 229032
51	C/70	Tap slag	4	141	FESMELT, charcoal fuel; abraded; dense	Undetermined	372508 229032
51	C/70	CBM	2	44	KEUP, flat roof tile	Post medieval	372508 229032
51	C/70	PMGL	1	16	waste glass	Post med/Mod	372508 229032
51	C/80	CBM	1	61	KEUP, flat roof tile	Post medieval	372501 229011
51	C/80	Channel slag	1	44	FESMELT, abraded; dense	Undetermined	372501 229011
51	C/80	PMGL	1	6	waste glass	Post med/Mod	372501 229011
51	C/80	Tap slag	1	144	FESMELT, abraded; dense	Undetermined	372501 229011
51	C/80	Pottery	1	1	PEAR, plate, blue feathered edge, R	Post medieval	372501 229011
51	C/90	Slag	2	106	FESMITH, abraded; probably HBs; charcoal fuel; different smiths?	Undetermined	372494 228994
51	C/90	CBM	1	12	KEUP, flat roof tile	Post medieval	372494 228994
51	C/90	Tap slag	4	51	FESMELT, abraded; dense	Undetermined	372494 228994
51	C/90	Slag	1	21	hearth lining attached; green and glassy; totally vitrified ceramic?	Undetermined	372494 228994
51	C/100	Tap slag	2	53	FESMELT, very, very abraded; dense	Undetermined	372487 228980
51	C/100	Coal	1	29	slagged.	Undetermined	372487 228980
51	C/100	CBM	1	54	KEUP, brick	Post medieval	372487 228980
51	C/110	Tap slag	1	6	FESMELT, abraded; dense	Undetermined	372481 228969
51	C/110	Slag	1	3	FEWKING	Undetermined	372481 228969
51	C/110	Coal	1	2		Undetermined	372481 228969
51	C/120	Pottery	1	6	WHITE, mug, B	Post medieval	372474 228959
51	C/120	Coal	1	4		Undetermined	372474 228959
51	C/120	Slag	1	4	FESMITH, smithing slag lumps; coal fuel?	?Post med/mod	372474 228959

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
51	C/130	Slag	1	28	FESMITH, hearth bottom; coal fuel; fresh?	?Post med/mod	372467 228951
51	C/140	Slag	3	8	FESMITH, coal fuel	Post med/mod	372460 228944
51	C/140	Coal	2	8		Undetermined	372460 228944
51	C/140	Tap slag	1	5	FESMELT, abraded; dense	Undetermined	372460 228944
51	D/40	Pottery	2	5	CREA, plate, BS	Post medieval	372521 229147
51	D/70	Tap slag	1	5	FESMELT, abraded; dense	Undetermined	372501 229025
51	D/110	CBM	1	1	KEUP, daub	Undetermined	372473 228962
51	D/110	PMGL	1	11	PMGL, glass bottle, tall form;1760+	Modern	372473 228962
51	D/120	CBM	1	41	KEUP, brick	Post medieval	372467 228952
51	D/120	CBM	1	30	KEUP, drain	Post medieval	372467 228952
51	D/130	CBM	2	54	KEUP, brick	Post medieval	372460 228944
51	E/0	Glass slag	1	12		Post medieval	372541 231568
51	E/0	Blast slag	1	12		Undetermined	372541 231568
51	E/40	Coal	1	11	slagged	Undetermined	372514 229140
51	E/40	Clinker	1	12		Undetermined	372514 229140
51	E/50	Pottery	1	75	STCOAR, bowl, B	Post medieval	372507 229085
51	E/50	Tap slag	1	107	FESMELT, abraded; dense	Undetermined	372507 229085
51	E/70	CBM	1	8	KEUP, flat roof tile, abr	Post medieval	372493 229018
51	E/70	PMGL	1	1	waste glass	Post med/Mod	372493 229018
51	E/100	CBM	1	103	brick	Modern	372473 228966
55	A/80	Pottery	1	3	TPW, plate, BS	19th+	372052 229492
55	A/150	Pottery	1	3	STCOAR, jar, BS	m18th+	371985 229404
55	B/60	Pottery	1	42	STCOAR, bowl, R	m18th+	372069 229541
55	B/90	Pottery	1	7	WHITE, dish, R	19th+	372040 229462
55	B/160	Tap slag	1	107	FESMELT, abraded; dense; bubbly base; large flows	Undetermined	371973 229388
55	B/190	CBM	1	204	HERA10, unknown, part of object formed in sanded mould; cf. box tile but with obtuse ar	116th+	371944 229373
55	B/190	Pottery	1	3	TPW, jug, BS	19th+	371944 229373
55	B/190	Pottery	1	3	CONP, cup, BS	19th+	371944 229373
55	B/230	Tap slag	1	65	FESMELT, no top/base; bubbly base	Undetermined	371906 229359
55	C/50	Pottery	1	12	ENGS, bot, BS	118th+	372075 229578
55	C/80	Pottery	1	2	CREA, tank, BS	118/19th+	372047 229472
55	C/150	Pottery	1	13	STCO, dish, probably late slip trailed type, BS	117th/e18th	371980 229385

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
55	C/170	Pottery	1	6	STRE, CHP, BS	117th/e18th	371961 229373
55	C/230	Pottery	1	1	STMO, POSS, BS	117th/e18th	371903 229349
55	D/20	Pottery	1	4	TPW, plate, BS	19th+	372101 229927
55	D/110	Tap slag	1	29	FESMELT, thin flows; sandy base	Undetermined	372015 229412
55	D/130	Pottery	1	5	TPW, plate, BS	19th+	371996 229391
55	D/170	Pottery	1	4	CREA, CHP, BS	118/19th+	371958 229363
55	E/120	Pottery	1	3	TPW, plate, BS	19th+	372003 229391
55	E/170	CBM	1	8	KEUP?, abundant R Q sand and white clay pellets, Roman?, BS, v. abr	116th+	371955 229354
55	E/200	CBM	1	5	STCOAR, flat, MOD, BS	118th+	371926 229340
55	E/220	CBM	1	9	HERA10, brick, BS	116th+	371907 229333
55	E/220	Slag	1	12	abraded; probably tap; dense	Undetermined	371907 229333
62		CBM	1	37	HERA10, brick, BS	116th+	371061 229944
62	A/40	CBM	1	3	WHITE, WALT, MOD, BS	19th+	371076 230287
62	A/40	CBM	1	83	HERA10, brick, BS	116th+	371076 230287
62	A/60	CBM	1	52	STCOAR, flat, MOD, ash glazed edge, BS	118th+	371073 230146
62	A/70	CBM	1	88	HERA10, brick, BS	116th+	371072 230104
62	A/90	Pottery	1	7	WEST, DJ, BS	117th/e18th	371069 230046
62	A/90	Pottery	1	7	DERBS, BLBOT, BS	m19th+	371069 230046
62	A/110	Pottery	2	12	STCOAR, bowl, recent break, BS	m18th+	371067 230008
62	A/110	Pottery	1	10	WHITE, plate, BS	19th+	371067 230008
62	B/50	Pottery	1	8	CREA, plate, BS	118/19th+	371065 230202
62	B/80	CBM	1	42	HERA10, brick, BS	116th+	371061 230070
62	B/120	Pottery	1	1	WHITE, bowl, BS	19th+	371055 229992
62	C/80	CBM	1	15	HERA10, flat, BS	116th+	371051 230069
62	C/90	Pottery	1	2	TPW, BS	19th+	371049 230043
62	C/120	Pottery	1	29	ENGS, SJ, BS	118th+	371046 229991
64	A/80	CBM	1	5	CBM, v. abr	Undetermined	370911 230743
64	A/80	Pottery	1	5	CBM, v. abr, BS	Post medieval	370911 230743
64	A/80	CBM	4	33	KEUP, brick	Post medieval	370911 230743
64	A/80	Pottery	1	3	HERA7D, highly micaceous, bowl, abr, BS	Post medieval	370911 230743
64	A/100	CBM	2	57	KEUP, flat roof tile	Post medieval	370899 230632
64	A/120	Pottery	1	9	WHITE, crazed, BS	Post medieval	370887 230557

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
64	A/130	CBM	1	1	KEUP, flat roof tile	Post medieval	370881 230527
64	A/130	CBM	1	4	KEUP, brick?	Post medieval	370881 230527
64	A/160	Pottery	1	4	HERA7D, bowl, abr, R	Post medieval	370863 230461
64	A/190	CBM	1	30	flat roof tile	Modern	370845 230414
64	A/200	Pottery	1	11	HERA7D, Upton Bishop light fabric, bowl, BS	Post medieval	370839 230402
64	A/200	Pottery	1	12	SELZ, bot, might be a Derbs Black - leading bottle instead, BS	Post medieval	370839 230402
64	A/200	CBM	1	1	KEUP	Undetermined	370839 230402
64	B/40	CBM	4	151	KEUP, flat roof tile, frost shattered	Post medieval	370927 231256
64	B/60	Flint	1	4	side scraper fragment, semi-invasive retouch, re-corticated	LN/EBA	370915 230917
64	B/60	CBM	1	39	KEUP, flat roof tile	Post medieval	370915 230917
64	B/60	CBM	2	49	KEUP, flat roof tile	Post medieval	370915 230917
64	B/80	CBM	1	90	flat roof tile	Modern	370903 230737
64	B/90	Pottery	1	1	PEAR, plate, BS	Post medieval	370897 230676
64	B/90	Pottery	1	1	NCBW, CLSD, industrial slipware, BS	Post medieval	370897 230676
64	B/130	CBM	1	2	KEUP, daub	Undetermined	370873 230521
64	B/130	Pottery	1	1	PEAR, plate, spalled, BS	Post medieval	370873 230521
64	B/140	CBM	1	9	KEUP, flat roof tile	Post medieval	370867 230496
64	B/150	CBM	1	1	KEUP	Undetermined	370861 230474
64	B/150	Pottery	1	9	WHITE, plate, R	Post medieval	370861 230474
64	B/150	Pottery	1	1	HERA7D, bowl, abr, BS	Post medieval	370861 230474
64	B/150	Pottery	1	3	WHITE, plate, BS	Post medieval	370861 230474
64	B/150	CTP	1	5	clay pipe	Modern	370861 230474
64	B/160	CBM	1	43	flat roof tile	Modern	370855 230455
64	B/160	CBM	1	45	KEUP, flat roof tile	Post medieval	370855 230455
64	B/170	Pottery	1	109	HERG7, cist/jug, DR, rect foot; stabbed on inside; foot heaving chipped and slightly burnt	Post medieval	370849 230437
64	B/180	CBM	1	9	KEUP, flat roof tile	Post medieval	370843 230422
64	B/180	CBM	1	2	KEUP, daub	Undetermined	370843 230422
64	B/230	CBM	1	18	KEUP, flat roof tile	Post medieval	370813 230365
64	B/290	CBM	2	96	KEUP, flat roof tile	Post medieval	370776 230322
64	B/290	CBM	1	4	KEUP, daub	Undetermined	370776 230322
64	B/290	CBM	1	17	KEUP, brick	Post medieval	370776 230322
64	C/30	Pottery	1	18	STMO, POSS, BS	Post medieval	370925 231565

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
64	C/80	PMGL	1	13	PMGL, glass bottle, tall form;1760+	Modern	370895 230731
64	C/90	CTP	1	7	clay pipe	Post medieval	370889 230670
64	C/100	Flint	1	4	flake fragment, broken, re-corticated	?Neo/BA	370883 230620
64	C/150	CTP	1	1	clay pipe	Post medieval	370853 230468
64	C/150	Pottery	1	1	TPW, CLSD, BS	Post medieval	370853 230468
64	C/170	Pottery	1	4	CBM, v. abr, BS	Post medieval	370841 230431
64	C/170	CBM	1	4	CBM, v. abr	Undetermined	370841 230431
64	C/170	Pottery	1	9	WEST, tank, B	Post medieval	370841 230431
64	C/170	Tap slag	1	15	FESMELT, Very abraded; dense	Undetermined	370841 230431
64	C/200	PMGL	1	18	PMGL, glass bottle, cobalt blue, moulded, fluted cylindrical form; C19th	Modern	370823 230390
64	C/230	Pottery	1	1	CBM, v. abr, BS	Post medieval	370805 230359
64	C/230	CBM	1	1	CBM, v. abr	Undetermined	370805 230359
64	C/230	Pottery	1	1	TPW, CLSD, BS	Post medieval	370805 230359
64	D/10	Pottery	1	10	NOTS, tank, abr, B	Post medieval	370929 233448
64	D/10	CBM	1	38	KEUP, brick	Post medieval	370929 233448
64	D/50	Pottery	1	3	WEST, tank, BS	Post medieval	370905 231044
67	A/30	CBM	1	18	HERA10, drain, black depo int & ext MnO??, BS	116th+	370237 230159
67	A/30	CBM	4	380	HERA10, brick, BS	116th+	370237 230159
67	A/70	CBM	1	73	HERA10, tegula, looks just like small, Roman teg, including thumbed groove along flang	116th+	370198 230322
67	A/70	Pottery	1	3	TPW, bowl, BS	19th+	370198 230322
67	A/140	CTP	1	2	clay pipe	Modern	370130 230391
67	A/190	Stone	1	141	burnt rounded river pebble; potboiler?	Undetermined	370082 230410
67	B/-10	CTP	1	6	clay pipe	Post medieval	370278 232590
67	B/0	CBM	3	165	HERA10, brick, BS	116th+	370269 228320
67	B/50	Pottery	1	8	FREC, DJ, B	m16/e17th	370220 230261
67	B/90	Slag	1	45	industrial waste	Post med/mod	370181 230342
67	B/90	CTP	1	2	clay pipe	Modern	370181 230342
67	B/90	Pottery	1	10	TPW, plate, BS	19th+	370181 230342
67	B/100	Pottery	1	27	WHITE, stand, shallow stand with triangular- sectioned, PROF	19th+	370172 230353
67	B/130	CBM	2	99	HERA10, brick, BS	116th+	370143 230376
67	C/20	CBM	1	6	HERA10, brick, BS	116th+	370252 230018
67	C/30	CBM	1	33	ENGS, drain, BS	19th+	370242 230140

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
67	C/30	Pottery	1	38	HERA7E, jar, oval handle; int glazed, BS	117th/m18th	370242 230140
67	C/90	Pottery	1	2	CREA, tank, industrial slipware; marbled, BS	118/ 19th+	370184 230333
67	C/90	CTP	3	2	clay pipe	Post medieval	370184 230333
67	C/100	CTP	1	1	clay pipe	Modern	370174 230343
67	C/100	Pottery	1	2	TPW, plate, BS	19th+	370174 230343
67	C/100	Pottery	1	1	TPW, cup, BS	19th+	370174 230343
67	C/100	Pottery	1	1	WHITE, moulded dec, BS	19th+	370174 230343
67	C/110	Pottery	1	4	STMO, bowl, BS	117th/e18th	370164 230352
67	C/140	CBM	3	189	HERA10, brick, BS	116th+	370135 230371
67	D/110	Pottery	1	22	WEST, BS	117th/e18th	370167 230342
67	D/140	CBM	1	25	HERA10, brick, BS	116th+	370138 230362
67	D/140	CTP	1	1	clay pipe	Modern	370138 230362
67	D/170	CTP	1	1	clay pipe	Modern	370109 230374
67	E/0	CBM	1	100	HERA10, drain, BS	116th+	370276 228291
67	E/20	Pottery	2	8	TPW, plate, BS	19th+	370257 229999
67	E/20	Pottery	2	10	CREA, bowl, B	118/19th+	370257 229999
67	E/80	CTP	1	4	clay pipe	Modern	370198 230300
67	E/100	CTP	1	1	clay pipe	Modern	370179 230324
67	E/110	Slag	1	2	fuel ash slag	Undetermined	370169 230333
67	E/110	CTP	3	11	clay pipe	Modern	370169 230333
67	E/120	Pottery	1	4	FREC, DJ, B	m16/e17th	370160 230340
67	E/130	CBM	1	43	HERA10, brick, BS	116th+	370150 230347
67	E/150	Flint	1	2	secondary flake/blade, ?utilised	prehistoric	370131 230357
67	E/160	Pottery	1	3	STSL, CHP, int & ext brown slipped, BS	117th/e18th	370121 230361
67	E/180	CBM	1	5	HERA10, brick, BS	116th+	370101 230368
67	E/180	Flint	1	2	cutting blade, 'blunting retouch' along distal end	Mesolithic	370101 230368
68	C/40	CBM	1	17	HERB5, brick?, BS	m16/e17th	369948 230269
68	C/40	Pottery	1	3	STRE, CHP, BS	117th/e18th	369948 230269
68	C/60	Pottery	1	6	HERB1, jar, BS, v. abr	13th/14th	369928 230301
68	C/90	Pottery	1	37	HERA7E, bowl, looks later than Newent glasshouse, R	117th/m18th	369899 230324
68	D/40	Pottery	1	19	ENPO, insulator, BS	119th/20th	369950 230259
68	D/70	Pottery	1	3	STSL, POSS?, brown- slipped, BS	117th/e18th	369921 230301

Appendix D: Tirley to Dymock - Table of Finds

Plot	Transect/ Stint	Material	Count	Weight (g)	Comments	Date	Grid Reference
68	E/50	Pottery	1	27	ENGS, flag, stamped 'R &./Ledbury', BS	118th+	369943 230268
68	E/80	Pottery	1	6	TPW, plate, BS	19th+	369914 230299
68	E/100	Pottery	1	29	NCBW, bowl, BS	19th+	369895 230309
71	A/0	Pottery	1	1	TPW, plate, spalled, BS	Post medieval	377272 213510
71	A/80	CBM	1	2	KEUP, drain	Post medieval	377218 227294
71	B/80	CBM	1	30	KEUP, flat roof tile	Post medieval	377225 227287
71	C/70	CBM	1	34	KEUP, brick	Post medieval	377239 227166
71	C/280	Pottery	1	3	TPW, CLSD, BS	Post medieval	377097 227885
71	C/310	Tap slag	1	30	FESMELT, abraded; dense.	Undetermined	377076 227910
71	D/90	CBM	1	17	KEUP, drain, light coloured, variegated	Post medieval	377233 227364
71	D/100	CBM	1	185	KEUP, brick	Post medieval	377226 227438
71	D/100	CBM	1	118	flat roof tile	Modern	377226 227438
71	D/110	CBM	1	185	KEUP, brick	Post medieval	377219 227498
71	D/270	Pottery	2	4	STSL, brown slipped int & ext, BS	Post medieval	377111 227869
71	D/280	CBM	1	11	KEUP, flat roof tile, abr	Post medieval	377104 227878
71	D/300	Pottery	1	1	TPW, plate, spalled, BS	Post medieval	377091 227895
71	D/300	Flint	1	4	secondary flake	?LN/BA	377091 227895
71	E/100	CBM	1	35	KEUP, brick	Post medieval	377234 227431

Appendix E
SPECIALIST REPORTS

Archaeogeophysical Survey (27 September, revised 14th December 2001)

by Alister Bartlet

Summary

This report describes a geophysical survey carried out along the route of a proposed gas pipeline from Tirley to Dymock, Gloucestershire. The survey forms part of an archaeological field evaluation being undertaken by Network Archaeology Ltd. on behalf of Mouchel Consulting Ltd. and Transco.

The techniques employed for the survey were magnetic susceptibility surveying, which may indicate the presence of past settlement sites or other areas in which soil magnetic properties have been affected by human activities, and magnetometer surveying.

The fieldwork for this project was undertaken in three stages. Pasture fields were surveyed in July 2001, followed by a number of fields which were previously under crops in September. The continuing presence of crops, particularly maize, and other access difficulties restricted coverage during the second phase, and some 9km of route from a total length of 14km were finally surveyed, as described in the first version of this report dated 27 September 2001. A further stage of fieldwork to cover the remaining sections of the route was then undertaken in November – December 2001, with results as now included in this revised report.

The survey results indicate a number of locations at which the possibility of archaeological features cannot be excluded without further investigation. These include fields 21 and 41, and others as noted in the appendix. Some magnetic disturbances towards the west of the route may well be natural, but archaeological features could also be present. Observation in fields 47 and 52 would clarify the significance of findings in other fields nearby.

The final stage of the fieldwork has produced only limited positive results. There are magnetic disturbances which may require further investigation in fields 18-21, but minimal findings elsewhere.

The survey has also indicated extensive sections of the route in which it is unlikely that any substantial archaeological remains are present.

Introduction

This survey was commissioned by Network Archaeology Ltd. as part of the archaeological field evaluation of the route of the proposed Tirley to Dymock pipeline, which is being undertaken for Mouchel Consulting Ltd. on behalf of Transco.

The survey included recorded magnetometer coverage along as much of the route as possible, accompanied by magnetic susceptibility measurements. We were asked to carry out an initial stage of the fieldwork in July 2001, when pasture fields were surveyed, and to return

following removal of crops in September. A number of access difficulties, including the extensive presence of maize, limited the coverage which could be achieved in the second stage. Some landowners also withdrew permission for access following the postponement of the construction phase of the project. Some 9km of the 14km length of the route was therefore surveyed, as described in the first version of this report (dated 27 September 2001). Additional fieldwork to cover the remainder of the route was requested in November, and completed in early December 2001. The only fields which have not now been surveyed are field 44, which remained under a foot and mouth restriction at the time of the fieldwork, and field 68. This field, together with small areas in fields 40 and 68, was heavily ploughed and rutted and unsuitable for magnetometer surveying.

This report includes the full text of the original version of 27 September, with additional notes on the results from the new work. The summary list of findings in the appendix has been updated.

The Proposed Route

The pipeline is to follow an east - west route extending from Tirley Above ground Installation (at NGR SO 813294, some 8km south west of Tewkesbury) to Dymock AGI (SO 698303, 7km south of Ledbury). Much of the route is level or gently sloping mixed farmland, but there are steeper slopes and higher elevations (to 70m AOD) towards the west.

The geology of the route is described in the Archaeological Desk Based Assessment for the project, as prepared by Network Archaeology [1]. The eastern half of the route is located on formations belonging to the Mercia Mudstones group, with Bromsgrove Sandstone to the west. Both are grouped on less detailed geological maps as New Red Sandstone. The western section of the route is a Raglan Mudstone, which is part of the lower Old Red Sandstone group.

Soils in areas of sandstone-based geology are not always strongly responsive to magnetometer surveying, although conditions may be modified locally by the presence of drift deposits, which in this case include gravels in the centre of the route and to the east of Staunton. There are also river terrace deposits, as well as limited areas of alluvium in valleys. A magnetometer survey may detect settlement or industrial features containing magnetically enhanced archaeological fill even in relatively unresponsive soils, and when naturally silted features are difficult to detect. The detailed surveying procedure used for this project also maximizes the likelihood that any detectable features present will be recorded.

Known archaeological sites and features in the vicinity of the route as listed in the DBA include few substantial sites or findings of prehistoric or Roman date in the immediate pipeline corridor, although the route is crossed by a Roman road. There may be two deserted medieval village sites nearby, as well as other more recent features and disturbances.

Survey Procedure

The survey was carried out using the two techniques of magnetometer and magnetic susceptibility surveying, which are the methods usually employed for large scale evaluation work of this kind.

The results obtainable from magnetometer and magnetic susceptibility surveys are related, but they will not necessarily detect the same features or disturbances. The magnetometer responds to cut features such as ditches and pits when they are silted with topsoil, which usually has a higher magnetic susceptibility than the underlying natural subsoil. It also detects the thermoremanent magnetism of fired materials, notably baked clay structures such as kilns or hearths. Burning associated with past human occupation enhances the magnetic susceptibility of topsoil, increasing the magnetometer response from ditches and pits, and also making it possible to locate sites by magnetic susceptibility measurements on the superficial topsoil. Susceptibility surveying can therefore be used to obtain a broad indication of previously occupied or disturbed areas, although the readings may be affected by a number of non-archaeological factors, including geology and land use. Areas of positive susceptibility response therefore often require further investigation, usually by detailed magnetometer surveying, before being accepted as archaeologically significant.

The magnetometer survey was arranged as a 15m wide strip along the full length of the route. This is equivalent to coverage of a sample area amounting to slightly over 40% of the 36m wide pipeline easement. A continuously recorded magnetometer survey of this kind provides much more complete coverage than the alternative method of unrecorded magnetometer scanning along a limited number of transect lines. The detailed approach used here was thought to be of particular relevance to this project, given that sandstone based soils often produce only comparatively weak magnetic anomalies, which are difficult to identify by scanning alone. It is possible in such conditions that buried ditches or other archaeological features not containing magnetically enhanced fill may fail to respond, but that sites may still be recognizable by an increase in the noise level of the survey, or the presence of clusters of small anomalies which can only be recognized in a recorded plot. A detailed survey also offers a more secure basis for eliminating areas from further archaeological consideration than is the case for an unrecorded magnetometer scan.

The magnetometer survey was carried out using Geoscan fluxgate magnetometers, and the results are presented as graphical or x-y trace plots and as grey scale plots on figures 9-16. These plots show the readings after standard processing operations including adjustments to the line spacing to correct for variations in the instrument zero setting, and numerical smoothing to reduce background noise levels. Outlines and cross hatching indicating selected magnetic anomalies of potential interest have been added to the graphical plots.

The magnetic anomalies which have been outlined on the plots are those for which an archaeological origin cannot be wholly excluded, although they may also include some extraneous features. Anomalies which are strong or narrow in profile, asymmetrical, or which have a prominent negative peak are likely to be caused by buried stones, bricks or iron objects and have been excluded as far as possible from the interpretation. The distribution and degree of clustering of the features, and correlations between magnetometer and susceptibility findings, as well as other archaeological evidence, are all relevant in reaching an interpretation. The anomalies as outlined are intended to signify the approximate distribution and extent of areas of potentially significant activity, but it is not always practical to indicate all individual

features. Strong disturbances which are clearly likely to be of recent origin are not necessarily included in the interpretation.

The susceptibility survey was based on readings taken at 12.5m intervals using Bartington MS2 susceptibility meters with the MS2D field probe. The initial susceptibility readings are displayed as strips of shaded squares of density proportional to the readings at 1:4000 scale on figures 1 - 8. The interpretative outlines as shown on the magnetometer plots have been added in red to these drawings at reduced scale to provide a summary of the survey findings

The survey was positioned in each field by reference to OS co-ordinates measured from the 1:2500 strip maps, and located with a sub-1m accuracy GPS system. Details of the GPS co-ordinates of the end points of individual magnetometer survey blocks, which may be required for relocating the survey findings, can be supplied on request.

The pipeline runs from east to west, and the field numbers as marked on the plans supplied to us also run in that direction. The data plots as reproduced in the report are therefore also arranged across the page in the same right to left sequence.

Results

The survey location is shown on figures 1 - 8 at 1:4000 scale. These maps are based on OS digital mapping of the route, and may not match the sheet boundaries of the 1:2500 strip maps. The magnetometer survey plots are also reproduced in sections in figures 9 - 16. Individual fields are identified by their numbers as used by Network Archaeology. The numbers are shown on the location plans and on the magnetometer plots. The survey findings are described here for the each of the location maps in turn.

Fields 2 - 9 (Figure 1)

Only fields 5, 6 and 9 could be surveyed here during the initial fieldwork. Access problems included newly ploughed land in fields 2 and 3. The surface immediately after ploughing is too uneven for magnetometer surveying, in which the instrument has to be carried steadily in straight lines, but fields are usually surveyable after further cultivation.

Field 6 shows a localised increase in susceptibility values, with some scattered magnetic anomalies. These include a larger pit-like feature some 50m from the west of the field. Groups of small magnetic anomalies are not conclusive evidence of archaeological features, but the findings could be consistent with the presence of limited remains of early settlement activity. The field could therefore perhaps be included in a list of sites to be examined further during a watching brief.

Additional results (12.01):

Fields 2-3 gave a minimal magnetic response. There are some very minor magnetic anomalies in fields 3 and 4, but in the absence of any more definite features these have not been included

in the interpretation. Field 4 contains a vegetation mark as noted in the desk based assessment (FRS:AA), but there is no corresponding activity in the survey response.

Fields 7-8 were equally unproductive. Susceptibility values in all these fields were sufficiently high (10+) to suggest that any reasonably substantial area of archaeological activity should have been detectable.

Fields 10 -18 (Figure 2)

Susceptibility values remain relatively high in field 10, possibly because the readings were taken on bare earth. There is only one weak and isolated magnetic anomaly. Field 11 is disturbed and was partly obstructed by farm machinery. It is therefore likely that the magnetic anomalies as marked there are non-archaeological.

The magnetic anomalies in fields 14 and 15 are very small and do not correspond to any significant susceptibility variation. There is an increase in susceptibility readings, but no significant magnetic activity in the western half of field 17.

Field 18 (12.01):

This field could not be surveyed previously because of heavily ridged ground and a potato crop. The magnetometer plots (reproduced in three sections from east to west on figure 10) show areas of increased magnetic disturbance (as marked by cross hatching) at three locations. These can be seen on figure 2 to correspond to areas of increased susceptibility response. There are not, however, any clearly identifiable individual magnetic anomalies of a kind which would clearly suggest this activity is archaeologically significant. The disturbances could therefore be of comparatively recent origin. The west end of the field is indicated as the site of a former orchard in the desk based assessment (DBA:AW), which could account for some of the magnetic activity seen there. The other two areas as marked towards the east of field 18 on figure 2 could perhaps be included in a watching brief, but their significance at present is uncertain.

Fields 19 - 26 (Figure 3)

Access to fields 19-20 and 23-27 was refused in September following the postponement of the construction of the pipeline. Field 19 lies immediately to the north of the Oridge medieval village site (SMR 05715). There is also the site of a former building (DBA:AE) in field 23.

There has been a re-route between fields 23 and 27, but the earlier version is shown on figure 3 because this section was not surveyed.

Fields 21 and 22 gave high susceptibility readings, which is partly an effect of the newly cultivated ground, but in field 21 there is also a cluster of magnetic anomalies. The individual anomalies are small, and some lie on sloping ground above the Glynch Brook, but the clear correspondence of magnetometer and susceptibility results could be significant

Fields 19 – 20 (12.01):

These fields produced a number of small magnetic anomalies, as also seen previously in field 21. These include pit-like anomalies and rather ill-defined linear features. The features are dispersed and not individually of conclusive archaeological origin, but the proximity of this area to the medieval village site may suggest the fields require further observation.

Fields 23 – 27

The recent survey here follows the southern re-route. (Field numbers have been transferred from the original route. The new field 26 is a belt of scrub and was not surveyed.) No clearly interpretable magnetic anomalies were detected, although there is an increase in (probably non-archaeological) magnetic disturbances in field 25.

Fields 27 - 36 (Figure 4)

Field 29 was surveyed on the former route in July, and the re-routed section to the east was not accessible in September. Fields 36 and 37 (figures 4-5) were under maize.

In field 32 there is a cluster of small magnetic anomalies. These could perhaps be disregarded, but they lie 100m to the south and at the nearest point on the route to the probable site of Ragman's Castle (SMR 20731.1). It is therefore not impossible that there could be traces of related activity nearby.

There are minimal magnetic disturbances in an area of high susceptibility readings in field 34.

Fields 27 – 29 (12.01):

Field 29 was originally surveyed on the previous northern route. Two further blocks (separated by an obstruction) have now been surveyed following the re-route. A slight earthwork, which could possibly suggest a ditched enclosure, is visible on the ground at the east of field 29 and extends into field 28. There is no corresponding identifiable survey response except for a possible slight localised increase in susceptibility readings, and some probably non-archaeological magnetic anomalies near the field boundary. The earthwork therefore appears unlikely to be a former settlement site, and could perhaps be natural.

Field 36:

One isolated magnetic anomaly is marked on the plans, but the overall response is quiet, and offers no further evidence for the presence of archaeological features.

Fields 37 - 41 (Figure 5)

This section was surveyed in full (by September) except for the areas under maize in field 37 and at the western edge of field 40.

There are magnetic anomalies at a number of locations between fields 38 and 41. It may be significant that there is a cluster of disturbances in field 39 where the field name 'Brick Fields' has been recorded (DBA:BZ), although the magnetic anomalies are too weak to suggest they relate directly to industrial activity.

Magnetic anomalies at the west of field 40 lie near to the possible (but uncertain) site of Pauntley medieval village (SMR 05312.1-3), but could also indicate ground disturbances associated with former orchards (DBA:BT). Another cluster of anomalies in the centre of the field lies near to the earthwork which appears to form part of the uncompleted Worcester and Dean Forest Railway (SMR 09957.1).

There are further groups of anomalies at some four locations in field 41 (which extends on to figure 7). The route passes near to a former agricultural building (DBA:CT), but this lies some distance to the west of the distinct anomalies in survey block 41B, and the possible linear feature in 41A.

Field 37 (12.01):

This field gave a quiet and uniform response in the magnetometer and susceptibility surveys.

A short block in field 40 which was previously obstructed by maize was found to heavily rutted, and was not surveyed.

Fields 42 - 49 (Figure 6)

Field 44 was under a foot and mouth restriction. There are weak magnetic anomalies in field 46, with perhaps linear features in field 47, and other anomalies in fields 48-49. There are cropmarks perhaps indicating an enclosure in field 46 (SMR 04418.1/2), but the magnetic activity extends across several fields to the east. There are high susceptibility readings in fields 46 - 48, and magnetic anomalies in fields 46 - 49. Archaeological features could be present, particularly in field 47 where there may be linear anomalies, but the remainder of the magnetic anomalies appear to be randomly distributed. It could therefore also be significant that land at Newbarn Farm and Walden Court (fields 45-48) is described as being very sandy in a Transco document listing land drains. The susceptibility effect in these fields could reflect a change in soil type, and some of the magnetic anomalies could indicate minor irregularities in the depth or distribution of a naturally magnetic topsoil.

12.01: No additional surveying.

Fields 50 - 59 (Figure 7)

There are possibly natural high susceptibility readings in field 50, as noted also in fields 46-48. The field name 'Little Berrow Field' (DBA:CE) could be archaeologically relevant, but there are no clearly identifiable magnetic anomalies in field 50. Crops prevented access (in September) to fields 51 and 55.

Field 52 contains strong magnetic anomalies as in fields 46 - 48, with a few more such features in 54, 56 and 58. The magnetic anomalies nowhere form a clear plan which would suggest or confirm the presence of an identifiable archaeological site, and so the possibility remains that they are natural. Further observation, especially in field 52, could exclude the possibility that significant archaeological features are present in these fields.

Field 51 (12.01):

There are strong magnetic anomalies here at locations which correspond to high susceptibility readings. The anomalies are, however, narrow spikes of a kind probably caused by buried iron or modern rubble, and are unlikely to be archaeologically significant.

Field 55:

This field also gave high susceptibility readings, and further strong (and probably non-archaeological) magnetic anomalies. Some of these effects could be present at an ancient industrial site, but the magnetic anomalies at such a site would usually form a more coherent plan.

Fields 60 -68 (figure 8)

The only possible findings here are some isolated pit-like anomalies in field 62. Crops prevented coverage in fields 64 and 67, which lies next to the former Gloucester and Ledbury railway (SMR 05893.1). This probably follows the line of the earlier Hereford and Gloucester canal (SMR 05303.1).

The results from field 68 are affected by interference from an existing pipe. A Roman road (SMR 07677.1/2) possibly intersects field 66, but the survey findings here appear to be particularly undisturbed.

Field 67 (12.01):

The magnetometer results from this field are also heavily disturbed by the existing pipe.

Conclusions

The survey has identified a number of locations at which further investigation at a later stage of the project may be required to exclude the possibility that archaeological features may be present. These include groups of magnetic anomalies associated with magnetic susceptibility variations in fields 21 and 41, as well perhaps as 6 and 39.

The stronger but irregularly distributed magnetic anomalies found toward the west of the route (in field 46-48 and 52-58) may be largely natural, but further investigation, particularly of the possible linear features in field 47, would show whether or not this is the case.

Additional findings from the final stage of the fieldwork include areas of magnetic activity which may call for further investigation in field 18, and isolated magnetic anomalies near to a medieval village site in fields 19-20.

A possible earthwork in fields 28 – 29 does not appear to be associated with any interpretable magnetic features.

Magnetic disturbances in fields 51 and 55 show few archaeological characteristics, although the possible presence of ancient industrial debris cannot be finally excluded on the survey evidence alone.

Revised Summary of Findings

This list notes the more significant findings from the magnetometer survey of this pipeline route. The grading (1-4) given alongside each entry refers to the reliability of the geophysical evidence rather than the archaeological significance of the findings.

- Grade 1: Distinct magnetic anomalies of probable archaeological origin.
- Grade 2: Magnetic anomalies possibly including natural or recent disturbances, but which could in part be archaeologically significant.
- Grade 3: Weak or isolated features; not necessarily archaeologically significant.
- Grade 4: Strong magnetic anomalies of probably recent or natural origin.

<u>Field</u>		<u>Grade</u>
6	Increased susceptibility values with sparse magnetic anomalies.	2-3
18	Areas of increased magnetic activity with susceptibility anomalies. No distinct individual features.	2
19-20	Some isolated features (near to medieval village site).	2-3
21	Magnetic anomalies (but some on sloping ground) in area of high susceptibility readings.	2

[28-29	Possible earthwork visible on ground, but no clear survey response.]	
32	Small magnetic anomalies close to site of Ragman's Castle.	2-3
39	Group of (weak) magnetic anomalies in 'Brick Field'.	3
40	Small magnetic anomalies near Pauntley DMV, and unfinished railway embankment, but could relate to former orchards.	3
41	Possible linear features and 2-3 groups of magnetic anomalies, with some susceptibility variation.	2
47	Possible linear features in field 47	2
46-48	Magnetic anomalies may be significant, but could indicate naturally magnetic soil.	3
52	Strong magnetic anomalies fail to form an interpretable plan. Possibly natural ?	2
54,56,58	Similar features to 52.	3
55	Strong magnetic anomalies and high susceptibility readings are probably recent (or natural), but ancient industrial remains cannot be conclusively excluded.	4

Reference

- [1] Tirley to Dymock Proposed High Pressure Gas Pipeline. Archaeological Desk Based Assessment. Report No. 262, June 2001. Prepared by Network Archaeology Ltd.

Report by:

A.D.H. Bartlett BSc MPhil

Bartlett - Clark Consultancy
Specialists in Archaeogeophysics

25 Estate Yard
Cuckoo Lane
North Leigh
Oxfordshire
OX8 6PS

01865 200864

27 September / 14 December 2001

P. Cottrell, W. Davies, D. Lewis and S. Brown assisted with this project.

Flint

David Bonner

Summary

Analysis of an unstratified flint assemblage has found evidence of Mesolithic activity, possibly relating to hunting expeditions and food forays. There is additionally evidence of Neolithic/Bronze Age activity.

Introduction

Twelve flints, found by structured field walking, were submitted for analysis.

Analysis

Raw Materials

Persistently thin, eroded cortex indicates that all of the flint is from a derived flint source, probably local drift, or river gravel.

Condition of Flint

Four flints (Plots 9, 64 and 67) are re-corticated. At some sites re-cortication is chronologically significant, but with such a small sample size, the presence of re-cortication does not assist with dating the flint.

Breakage and natural wear are evident on seven flints (Plots 9, 37, 40, 64 and 67), suggesting that these fields have been in intensive agricultural use.

Morphology of the Flint Assemblage

Tools

Tools have been distinguished from the debitage by macroscopic examination for 'retouch', the deliberate alteration of the flint edge.

There are two scrapers, one of probable late neolithic/early Bronze Age date (Plot 64), and one of middle to late Bronze Age date (Plot 2A). One blade, with 'blunting retouch' along its distal end, is probably a Mesolithic cutting blade (Plot 67). Two of the flakes/blades appear to have edge-wear suggesting that they may have been utilised as tools (Plots 18 and 67). However, it is possible that the apparent edge-wear is in fact post-depositional damage.

Cores

No cores were found, but a possible core fragment was found in Plot 40.

Flakes

Six flakes and/or blades were found. Two of these may have been used as tools (see above).

Heat-affected flint

Two tiny pieces of flint show signs of heating, one in a reducing, high-temperature environment, and the other in a low temperature, oxidising environment.

Discussion

The assemblage includes material that ranges from the Mesolithic to the Bronze Age. However, observations have been limited by plough damage, re-cortication, an absence of chronologically diagnostic traits, and an absence of any proximal ends which prevented distinction between hard and soft hammer manufacture.

The low density of the assemblage in each field suggests that it is the result of either mesolithic hunting expeditions, and/or neolithic/Bronze Age exploitation of the area, rather than occupation.

Plot	Transect	Stint	Analysis	Weight	Date
2A	C	30	side/end scraper		?MLBA
8	E	40	heat-affected flint, reduced		undetermined
9	B	20	tertiary flake fragment, re-corticated		?Neo/BA
18	E	500	secondary flake/blade, ?utilised		prehistoric
37	C	10	blade fragment		mesolithic
40	C	10	?core fragment or naturally fractured flint		?LN/BA
51	A	70	heat-affected flint, oxidised		undetermined
64	B	60	side scraper fragment, semi-invasive retouch, re-corticated		LN/EBA
64	C	100	flake fragment, broken, re-corticated		?Neo/BA
67	E	180	cutting blade, 'blunting retouch' along distal end		mesolithic
67	E	150	secondary flake/blade, ?utilised		prehistoric
71	D	300	secondary flake		?LN/BA

Pottery and Ceramic Building Material (report on part 1 of the fieldwalking)

by Alan Vince

Pottery and/or ceramic building material was recovered from twelve areas along the line of the Tirley to Dymock pipeline (Table 1). The finds ranged from Iron Age to the 20th-century in date (Table 2). There has been less fieldwalking and archaeological investigation to the west of the Severn and it is therefore not easy to extrapolate from field scatters to below-ground archaeology. Nevertheless, it would seem that there is likely to have been Iron Age occupation at Pl.9 whereas the four sherds of Roman pottery are more likely to be the result of field manuring during the Roman period. They are certainly insufficient evidence for occupation, since each sherd came from a different site. The few sherds of medieval pottery were almost certainly from manuring scatters at Pl.18 and Pl.68, on the fringes of Corse and Dymock respectively. Early post-medieval pottery is equally scarce but includes two Frechen stoneware vessels from Pl.67. No contemporary coarsewares were found on this site and it is likely that the stonewares were heirlooms discarded in the later 17th or 18th centuries.

Later post-medieval material was present on most of the sites and seems in the main to be of late 17th/early 18th century date. Pl.20 and Pl.40 can be singled out since they produced ceramic building material but no pottery. That from Pl.20 is all brick, including examples of mid 16th to early 17th century date whereas that from Pl.40 is a mixture of brick and flat roof tiles. It is possible that both of these scatters indicate the presence of agricultural buildings on the sites. If so, this would be quite remarkable in the case of Pl.20 since some of the bricks found date to a period when brick was just being introduced to the area and was used mainly in high status structures, chimneys and infilling panels within timber-framed buildings.

Methodology

All were identified and recorded using a ware/fabric classification based on that published for Hereford (Vince 1985) which is slightly more refined than that used at Gloucester City Museums (Vince 1983). Forms were classified using the terms defined in the dictionary of medieval ceramic forms (MRPG). The data were recorded in an excel spreadsheet, a copy of which is deposited with Network Archaeology for digital archiving.

Table 1

Plot	Localit y	ngs	x coord:	y coord:	ngr precision
02	Tirley	SO	8130	2950	6
02a	Tirley	SO	8130	2950	6
03	Tirley	SO	8110	2940	6
05	Tirley	SO	8080	2920	6
09	Corse	SO	8020	2870	6
10	Corse	SO	8010	2860	6
18	Corse	SO	7940	2830	6
20	Corse	SO	7870	2800	6
21	Corse	SO	7801	2224	8
36	Pauntley	SO	7579	2839	8
40	Newent	SO	3750	2970	6
55	Newent	SO	7200	2920	6
62	Dymock	SO	7100	2980	6

67	Dymock	SO	7020	3050	6
68	Dymock	SO	6990	3040	6

Table 2

Plot	Iron Age	Roman	med	post-me d	post-med +	emod	Grand Total
02				3	1		4
02a		1		2	4	1	8
03				1			1
05				2		3	5
09	1	1		3	1		6
10				2			2
18			3	66	3	22	94
20				10			10
21		1					1
36		1					1
40				13			13
55				6	2	11	19
62				6	2	8	16
67				25		12	37
68			1	4		4	9
Total	1	4	4	143	13	61	226

Iron Age

A single sherd of Iron Age Malvernian pottery was found, a jar rim. This ware, first identified by David Peacock, is tempered with abundant fragments of Malvernian rock and was in use in the pre-Roman Iron Age and into the post-Conquest period. The sherd has lost its surface but is nevertheless in good condition and probably, therefore, originated in an archaeological feature rather than the ploughsoil.

Roman

Four sherds of Roman pottery were found. All were untempered Severn Valley ware vessels, three of which were oxidized and the fourth reduced. Such wares were used throughout the Roman period, fluctuating in frequency at the expense of other coarsewares. The present sherds are likely to be products of the Malvern Link potteries, immediately to the north of the pipeline.

Medieval

Four sherds of medieval pottery were found, all from the Malvern Chase potteries, centred on Hanley Castle. The sherds came from Pl.18 and Pl.68. One sherd (Pl.18) was extremely abraded but could be identified as a 13th-century jar rim. Its condition probably indicates that it was brought onto the site with manure. The other sherds are later in date and include a wheelthrown jar of late 13th to 14th-century date (Pl.68) and glazed jug and jar sherds from Pl.18 which are probably late 14th to early 16th century in date.

Post-medieval

Four sherds of mid 16th to early 17th-century date were found, one each in Pl.2a and Pl.18 and two in Pl.67. The former were sherds of late Malvern Chase ware (a fabric defined at Hereford, Vince 1985, HERB5) and the latter were Frechen stoneware, two sherds of drinking jugs with moulded bases. Such vessels were sometimes highly prized and fitted with pewter or silver lids and the fact that no other pottery of this period was found at Pl.67 suggests that the vessels may have been heirlooms discarded a century or so after manufacture.

Two sherds of late 16th to 17th-century Post-Medieval Welsh Borderland wares were found. This ware was produced at a number of kilnsites, including Dymock itself (Haind Park Wood) where potters were recorded in an early 17th-century muster roll. There are no distinguishing characteristics which would help to identify the two sherds, both of which are from Pl.9.

Late 17th to mid 18th-century wares were more common and were found at Pl.18, Pl.55, Pl.62, Pl.67 and Pl.68. The collection spans the entire range of wares likely to be found on settlements of this date, from local products (including some produced at Newent Glasshouse, HERA7E, Vince 1977) to Staffordshire slipwares (STBRs, STRE, STSL, STMO, STCO) and imported Westerwald stoneware. The range of forms represent includes food preparation vessels, serving vessels, drinking vessels and chamber pots. The pottery therefore probably originated as farm refuse rather than vessels used by farm workers in the fields or agricultural buildings.

Early Modern

Eleven sherds of Staffordshire Coarseware were found. This ware was produced and traded down the Severn Valley alongside the slipwares and other finewares from the mid 17th century onwards. However, it only came into common use when the local potteries such as Newent Glasshouse. Closed, in the mid 18th century and in the main the sherds here are likely to be of that date. However, in two cases, Pl.2, Pl.2a and Pl.9, there were no later sherds from the sites which might indicate an earlier date. It may be significant that these sites are the closest to the river Severn.

Late 18th century and later pottery was found on Pl.18, Pl.55, Pl.62, Pl.67 and Pl.68. The range of wares found is in the main typical of domestic assemblages of this period in the Severn Valley, although two sherds of English stoneware flagons (Pl.62 and Pl.68) may have been used to contain cider for farm workers at harvest time. They were, however, a standard component of domestic assemblages so this is by no means proven. A fragment of a porcelain cup, of western European rather than far eastern origin, was present at Pl.55 but by and large the wares present would have been available to all levels of society and are typical of those found on cottage sites as well as middle class town houses or yeoman farms. There is, perhaps, a paucity of vessels associated with tea drinking and a preponderance of plates.

Pottery of mid-19th century and later types is present, the latest being a fragment of porcelain insulator used with electric fences or pylons which is presumably of mid 20th-century or later date. There is, however, little in the collection which is definitely late 19th or 20th century. This is almost certainly due to manuring practices and the use of chemical fertilisers.

The Building Material

There are a couple of fragments of ceramic building material from the pipeline which might be of Roman date but the earliest certain finds are of mid 16th to early 17th century date. This is the earliest period at which brick and flat roof tile were used in the area and their presence is therefore of some interest. By the end of the 16th century local brickworks were appearing throughout the area, although most domestic buildings were timber-framed. Brick was used at this period for chimneys and infilling panels within timber-framed buildings.

By the late 17th century fully brick buildings were being constructed and it is presumably to this period that the majority of the fragments found on the pipeline route belong. The extremely local nature of this material is well illustrated by the pipeline collection. Two main fabrics were noted, one utilising Mercian Mudstone (aka Keuper Marl), which outcrops along the west side of the Severn, and the other utilising Devonian marl (or glacial deposits composed wholly of reworked marl). The latter was the source of the clay used at the Dymock and Newent potteries.

Later material consists of flat roof tiles made from Coal Measures red- and light-firing clays. These are likely to have been imported to the area rather than utilising local sources. An exception is a possible fragment of Coleford ware chimney pot from Pl.18.

Roman?

A single fragment of tile from Pl.67 appears to be the flange of a *tegula* although in fabric and appearance the object is typical of post-medieval tile in this area. Roman style roof tiles were used in the medieval period in this area but are glazed and made in coarse sand- or gravel-tempered fabrics.

Post-medieval

Four fragments of Malvern Chase brick were found. These were produced alongside pottery in the Hanley Castle area in the mid 16th to early 17th centuries and are tempered with abundant large fragments of Malvernian rock. These bricks are much thinner than later bricks in the area and are quite distinctive. Until this find, they were known from high status sites, such as the Bishop of Hereford's palace at Breinton, in the middle Wye valley, or on urban town house sites at Hereford and Gloucester. Such bricks are recorded in documentary sources as being used at St Katherine's Hospital in Ledbury in the late 16th century. Originally, therefore, the bricks from the pipeline sites are likely to have been used in a high status 16th or early 17th century building. They were found at Pl.20 (three fragments) and Pl.68. No contemporary pottery was found at either site. At Pl.20 all the finds are of ceramic building material. This suggests that they may have come from an agricultural building on the site, but if so then the brick is likely to have been reused from a higher-status building elsewhere. At Pl.68 there is no other ceramic building material and the accompanying pottery is of late 17th-century or later date. Presumably, in this case the brick came from the same source as this domestic refuse (which may in this case be the village of Dymock itself).

The remaining post-medieval brick and tile is of two types, the Devonian marl fabric (HERA10) and the Mercian Mudstone fabric (KEUP). The distribution of these two fabrics shows that the Mercian Mudstone bricks and tiles do not occur further west than Pl.40 whereas the Devonian marl bricks and tiles are more widespread, although still with a bias towards sites at the western end of the pipeline (Table 3).

Table 3

PLOT	HERA10	HERB5	KEU P	KEUP ?
02			3	
02a			1	
03	1			
05			2	
09	1			
10	1		1	
18	21		37	
20	1	3	6	
40			13	
55	2			1
62	5			
67	19			
68		1		
Total	51	4	63	1

In addition to the possible structure at Pl.20, Pl.40 also produced only building material, a mixture of bricks and flat roof tiles, one with a square peg hole. This too is likely to be the site of a post-medieval brick outbuilding. Fourteen fragments of pantiles were found, all at Pl.18. This type of tile did not occur in the Severn Valley until the late 17th or 18th century and the site did produce a small quantity of pottery of that date.

Early Modern

Later ceramic building material includes a glazed stoneware drainpipe fragment, of late 19th or 20th-century date, from Pl.67, a whiteware wall tile of 19th or 20th-century date from Pl.62, a fragment of a chimney possibly of Coleford ware from Pl.18 and fragments of mass-produced flat roof tiles in Coal Measures clays from five sites.

Assessment

The Iron Age sherd from PL.9 may be evidence for occupation of that period. None of the other pottery is likely to represent occupation on site but is most likely to be the result of manuring, from the Roman period onwards. The Tudor bricks from Pl.20 require further investigation, although they are most likely to have been re-used in an agricultural building in the 17th-century or later. The brick and tile from Pl.40 indicates the probable existence of a building of that date on the site, since no domestic refuse was present on the site. The use of peg tile rather than pantile for its roof might indicate a late 16th to mid 17th century date, although it is likely that both methods of roofing co-existed in the area during the later 17th and 18th centuries.

Bibliography

Vince, A G (1977) *Newent Glasshouse: A late 16th-century and early 17th-century Glasshouse and late 17th- to early 18th-century pottery*, Comm Rescue Archaeol Avon Gloucestershire Somerset Occas Pap, 13-31, Comm Rescue Archaeol Avon Gloucestershire Somerset, Bristol

- Vince, A G (1977) The Medieval and Post-Medieval Ceramic Industry of the Malvern Region; the study of a ware and its distribution, in Peacock, D P S (ed) *Pottery and Early Commerce*, 257-305, Academic Press, London
- Vince, A G (1983) Post-Medieval Pottery, in C. Heighway (ed) *The East and North Gates of Gloucester*, Western Archaeological Trust, 131-161
- Vince, A G (1983) *The Medieval Ceramic Industry of the Severn Valley*, Unpublished PhD Thesis, Univ Southampton
- Vince, A G (1985) Part 2: the ceramic finds, in Shoesmith, R (ed) *Hereford City Excavations Volume 3: The Finds*, CBA Res Rep 56, 34-82

Ceramic finds:

Date	Plot	Trans	Stint	Class	C name	Form	Subfabric	Nosh	No V	Description	Part	Weight	Use	Condition
116th+	02	C	20-30	CBM	KEUP	brick		3	3		BS	34		
m18th+	02	D	10-20	Pottery	STCOAR	bowl		1	1		BS	9		
Roman	02a	A	10-20	Pottery	Roman	jar	SVW	1	1		BS	0	v. abr	
m16 / e 7th	02a	A	100- 110	Pottery	HERA5	jar		1	1		BS	21	sooted ext	
116th+	02a	C	180- 90	CBM	KEUP	brick		1	1		BS	20		
m18th+	02a	A	180- 90	Pottery	STCOAR	bowl		2	1	recent break	BS	31		
m18th+	02a	A	220- 230	Pottery	STCOAR	bowl		1	1		BS	8		
m18th+	02a	D	50-60	Pottery	STCOAR	bowl		1	1		BS	30		
118th+	02a	E	150- 160	CBM	STCOAR	flat	MOD	1	1		BS	39		
116th+	03	A	130- 140	CBM	HERA10	flat	angular gravel on base - flint?	1	1		BS	40		
116th+	05	D	30-40	CBM	KEUP	brick		2	2		BS	14		
118th+	05	D	30-40	CBM	STCOAR	flat	MOD	1	1		BS	18		
118th+	05	D	120- 130	CBM	STCOAR	flat	MOD	1	1		BS	36		
118th+	05	A	120- 130	CBM	STCOAR	flat	MOD	1	1		BS	47		

Date	Plot	Trans	Stint	Class	C name	Form	Subfabric	Nosh	No V	Description	Part	Weight	Use	Condition
Iron Age	09	E	100-110	Pottery	IA MALV	jar		1	1		BS	8	not too badly abraded, i.e. from feature?	
Roman	09	D	40-50	Pottery	Roman	jar	SVW	1	1		BS	6		
116th / m17th	09	D	70-80	Pottery	HERA7D	bowl		1	1		BS	3		
116th+	09	E	0-10	CBM	HERA10	brick		1	1		BS	182		
116th / m17th	09	C	110-120	Pottery	HERA7D	bowl		1	1		BS	5		
m18th+	09	C	40-50	Pottery	STCOAR	bowl		1	1		BS	15		
116th+	10	D	20-30	CBM	HERA10	brick		1	1		BS	90		
116th+	10	B	0-10	CBM	KEUP	brick		1	1		BS	37		
13th	18	E	650-660	Pottery	HERB1	jar		1	1	C13th rim type	R	7	v. abr	
114th / m16th	18	C	500-510	Pottery	HERB4	jar		1	1		BS	3		
114th / m16th	18	B	180-190	Pottery	HERB4	jug		1	1		BS	3		
116th+	18	A	190-200	CBM	HERA10	brick		7	7		BS	76		
116th+	18	D	80-90	CBM	HERA10	brick		1	1		BS	19		
116th+	18	C	10-20	CBM	HERA10	brick		1	1		BS	16		
116th+	18	E	650-660	CBM	HERA10	pantile	reduced	1	1		BS	48		
116th+	18	E	660-670	CBM	HERA10	pantile	reduced	1	1		BS	20		

Date	Plot	Trans	Stint	Class	C name	Form	Subfabric	Nosh	No V	Description	Part	Weight	Use	Condition
116th+	18	E	650-660	CBM	HERA10	pantile	reduced	2	2		BS	49		
116th+	18	C	660-670	CBM	HERA10	pantile		1	1		BS	34		
116th+	18	B	270-280	CBM	HERA10	pantile		1	1		BS	5		
116th+	18	D	650-660	CBM	HERA10	pantile		1	1		BS	14		
116th+	18	D	650-660	CBM	HERA10	pantile		1	1		BS	6		
116th+	18	E	660-670	CBM	HERA10	pantile		3	3		BS	52		
116th+	18	D	660-670	CBM	HERA10	pantile		1	1		BS	7		
116th+	18	A	50-60	CBM	KEUP	brick		1	1		BS	7		
116th+	18	B	180-190	CBM	KEUP	brick		4	4		BS	11		
116th+	18	B	60-70	CBM	KEUP	brick		1	1		BS	7		
116th+	18	B	20-30	CBM	KEUP	brick		1	1		BS	36		
116th+	18	E	30-40	CBM	KEUP	brick		3	3		BS	15		
116th+	18	A	0-10	CBM	KEUP	brick		1	1		BS	15		
116th+	18	B	190-200	CBM	KEUP	brick		1	1		BS	18		
116th+	18	A	180-190	CBM	KEUP	brick		14	14		BS	119		
116th+	18	C	270-280	CBM	KEUP	brick		2	2		BS	13		
116th+	18	B	280-290	CBM	KEUP	brick		1	1		BS	11		

Date	Plot	Trans	Stint	Class	C name	Form	Subfabric	Nosh	No V	Description	Part	Weight	Use	Condition
116th+	18	C	10-20	CBM	KEUP	brick		8	8		BS	69		
116th+	18	B	450-460	CBM	KEUP+C ALC	-	calc gravel temper	1	1		BS	3		
116th+	18	C	440-450	CBM	KEUP+C ALC	chimney	calc gravel temper	1	1		BS	10		
116th+	18	B	440-450	CBM	KEUP+C ALC	chimney	calc gravel temper	1	1		BS	29		
117th / e18th	18	B	640-650	Pottery	STSL	POSS		1	1	brown slipped ext	B	9		
117th / e18th	18	C	250-260	Pottery	STBRS	tank		1	1		B	19		
117th / m18th	18	D	650-660	Pottery	HERA7E	bowl		1	1		R	12		
117th / m18th	18	A	240-250	Pottery	HERA7E	bowl		1	1		BS	35		
m16 / e17th	18	C	650-660	Pottery	HERA5	PANC		1	1		BS	29		
m18th+	18	A	80-90	Pottery	STCOAR	bowl		1	1		BS	13		
m18th+	18	B	90-100	Pottery	STCOAR	bowl		1	1		BS	11		
m18th+	18	B	240-250	Pottery	STCOAR	jar		1	1		BS	3		
19th+	18	B	350-360	Pottery	TPW	-		1	1		BS	4		
19th+	18	D	260-270	Pottery	TPW	bowl		1	1		BS	19		
19th+	18	B	190-200	Pottery	TPW	bowl		1	1		BS	7		

Date	Plot	Trans	Stint	Class	C name	Form	Subfabric	Nosh	No V	Description	Part	Weight	Use	Condition
19th+	18	D	660-670	Pottery	TPW	bowl		1	1		R	4		
19th+	18	B	600-610	Pottery	TPW	CLSD		1	1		BS	3		
19th+	18	A	270-280	Pottery	TPW	egg cup		1	1		BS	17		
19th+	18	D	650-660	Pottery	WHITE	jar		1	1		BS	3		
19th+	18	C	30-40	Pottery	WHITE	jug		1	1	sponged	BS	6		
19th+	18	B	600-610	Pottery	TPW	plate		1	1		BS	3		
19th+	18	D	650-660	Pottery	TPW	plate		1	1		BS	3		
19th+	18	D	650-660	Pottery	TPW	plate		1	1		BS	9		
19th+	18	C	650-660	Pottery	TPW	plate		2	2		BS	13		
19th+	18	C	650-660	Pottery	TPW	plate		1	1		BS	1		
118/19th+	18	D	630-640	Pottery	CREA	plate		2	2		BS	9		
118th+	18	B	280-290	Pottery	PEAR	bowl		1	1		BS	3		
m19th+	18	C	430-440	Pottery	DERBS?	jar		1	1		BS	7		
118/19th+	18	A	440-450	CBM	COLEFORD?	chimney		1	1		BS	8	sooted int and ext	

Date	Plot	Trans	Stint	Class	C name	Form	Subfabric	Nosh	No V	Description	Part	Weight	Use	Condition
118th+	18	A	270-280	CBM	STCOAR	flat	MOD	1	1		BS	43		
118th+	18	A	430-440	CBM	STCOAR	flat	MOD	1	1		BS	65		
118th+	18	B	280-290	CBM	STCOAR	flat	SST and white clay pellets	1	1		BS	30		
116th+	20	77703	28269	CBM	HERA10	brick		1	1		BS	72		
116th+	20	77869	28296	CBM	KEUP	brick		6	6		BS	28		
m16/e1 7th	20	77703	28269	CBM	HERB5	brick		1	1		BS	57		
m16/e1 7th	20			CBM	HERB5	brick		1	1		BS	12		
m16/e1 7th	20	77869	28296	CBM	HERB5	brick		1	1		BS	43		
Roman	21	78013	22246	Pottery	Roman	WM jar	SVW	1	1		BS	10		
Roman	36	75798	28393	Pottery	Roman	jar	grey SVW	1	1		BS	3		
116th+	40	D	340-350	CBM	KEUP	brick		1	1		BS	34		
116th+	40	A	270-280	CBM	KEUP	brick		1	1		BS	231		
116th+	40	C	290-300	CBM	KEUP	brick	rounded quartz sand temper	2	2		BS	434		
116th+	40	A	200-210	CBM	KEUP	brick		4	4		BS	199		
116th+	40	D	350-360	CBM	KEUP	flat		1	1		BS	57		
116th+	40	A	10-20	CBM	KEUP	flat		2	2	square peg hole	BS	69		
116th+	40	B	40-50	CBM	KEUP	flat		1	1		BS	69		

Date	Plot	Trans	Stint	Class	C name	Form	Subfabric	Nosh	No V	Description	Part	Weight	Use	Condition
116th+	40	C	300-310	CBM	KEUP	flat		1	1		BS	23		
116th+	55	B	190-200	CBM	HERA10	unknown		1	1	part of object formed in sanded mould; cf. box tile but with obtuse angles	BS	204		
116th+	55	E	220-230	CBM	HERA10	brick		1	1		BS	9		
116th+	55	E	170-180	CBM	KEUP?	-	abundant R Q sand and white clay pellets	1	1	Roman?	BS	8	v. abr	
117th/e 18th	55	C	170-180	Pottery	STRE	CHP		1	1		BS	6		
117th/e 18th	55	C	150-160	Pottery	STCO	dish		1	1	probably late slip trailed type	BS	13		
117th/e 18th	55	C	230-240	Pottery	STMO	POSS		1	1		BS	1		
m18th+	55	B	60-70	Pottery	STCOAR	bowl		1	1		R	42		
m18th+	55	A	150-200	Pottery	STCOAR	jar		1	1		BS	3		
118th+	55	C	50-60	Pottery	ENGS	bot		1	1		BS	12		
118/19th+	55	D	170-180	Pottery	CREA	CHP		1	1		BS	4		

Date	Plot	Trans	Stint	Class	C name	Form	Subfabric	Nosh	No V	Description	Part	Weight	Use	Condition
19th+	55	B	190-200	Pottery	CONP	cup		1	1		BS	3		
19th+	55	B	90-100	Pottery	WHITE	dish		1	1		R	7		
19th+	55	B	190-200	Pottery	TPW	jug		1	1		BS	3		
19th+	55	D	20-30	Pottery	TPW	plate		1	1		BS	4		
19th+	55	E	120-130	Pottery	TPW	plate		1	1		BS	3		
19th+	55	D	130-140	Pottery	TPW	plate		1	1		BS	5		
19th+	55	A	80-90	Pottery	TPW	plate		1	1		BS	3		
118th+	55	E	200-210	CBM	STCOAR	flat	MOD	1	1		BS	5		
118/19th+	55	C	80-90	Pottery	CREA	tank		1	1		BS	2		
116th+	62	71061	29944	CBM	HERA10	brick		1	1		BS	37		
116th+	62	A	70-80	CBM	HERA10	brick		1	1		BS	88		
116th+	62	B	80-90	CBM	HERA10	brick		1	1		BS	42		
116th+	62	A	40-50	CBM	HERA10	brick		1	1		BS	83		
116th+	62	C	80-90	CBM	HERA10	flat		1	1		BS	15		
117th/e 18th	62	A	90-100	Pottery	WEST	DJ		1	1		BS	7		
m18th+	62	A	110-120	Pottery	STCOAR	bowl		2	1	recent break	BS	12		
19th+	62	C	90-100	Pottery	TPW	-		1	1		BS	2		
m19th+	62	A	90-100	Pottery	DERBS	BLBOT		1	1		BS	7		

Date	Plot	Trans	Stint	Class	C name	Form	Subfabric	Nosh	No V	Description	Part	Weight	Use	Condition
19th+	62	B	120-130	Pottery	WHITE	bowl		1	1		BS	1		
118/19th+	62	B	50-60	Pottery	CREA	plate		1	1		BS	8		
19th+	62	A	40-50	CBM	WHITE	WALT	MOD	1	1		BS	3		
19th+	62	A	110-120	Pottery	WHITE	plate		1	1		BS	10		
118th+	62	C	120-130	Pottery	ENGS	SJ		1	1		BS	29		
118th+	62	A	60-70	CBM	STCOAR	flat	MOD	1	1	ash glazed edge	BS	52		
116th+	67	D	140-150	CBM	HERA10	brick		1	1		BS	25		
116th+	67	B	130-140	CBM	HERA10	brick		2	1		BS	99		
116th+	67	B	0-10	CBM	HERA10	brick		3	3		BS	165		
116th+	67	E	130-140	CBM	HERA10	brick		1	1		BS	43		
116th+	67	E	180-190	CBM	HERA10	brick		1	1		BS	5		
116th+	67	C	20-30	CBM	HERA10	brick		1	1		BS	6		
116th+	67	C	140-150	CBM	HERA10	brick		3	3		BS	189		
116th+	67	A	30-40	CBM	HERA10	brick		4	4		BS	380		
116th+	67	A	30-40	CBM	HERA10	drain		1	1	black deposit & ext MnO??	BS	18		
116th+	67	E	0-10	CBM	HERA10	drain		1	1		BS	100		

Date	Plot	Trans	Stint	Class	C name	Form	Subfabric	Nosh	No V	Description	Part	Weight	Use	Condition
116th+	67									looks just like small, Roman teg, including thumbbed groove along flange				
		A	70-80	CBM	HERA10	tegula		1	1		BS	73		
117th/e 18th	67	D	110- 120	Pottery	WEST	-		1	1		BS	22		
117th/e 18th	67	C	110- 120	Pottery	STMO	bowl		1	1		BS	4		
117th/e 18th	67	E	160- 170	Pottery	STSL	CHP		1	1	int & ext brown slipped	BS	3		
117th/m 18th	67	C	30-40	Pottery	HERA7E	jar		1	1	oval handle; int glazed	BS	38		
m16/e1 7th	67	B	50-60	Pottery	FREC	DJ		1	1		B	8		
m16/e1 7th	67	E	120- 130	Pottery	FREC	DJ		1	1		B	4		
19th+	67	C	30-40	CBM	ENGS	drain		1	1		BS	33		
19th+	67	C	100- 110	Pottery	WHITE	-		1	1	moulded dec	BS	1		
118/19t h+	67	E	20-30	Pottery	CREA	bowl		2	2		B	10		
19th+	67	A	70-80	Pottery	TPW	bowl		1	1		BS	3		
19th+	67	C	100- 110	Pottery	TPW	cup		1	1		BS	1		

Date	Plot	Trans	Stint	Class	C name	Form	Subfabric	Nosh	No V	Description	Part	Weight	Use	Condition
19th+	67	B	90-100	Pottery	TPW	plate		1	1		BS	10		
19th+	67	E	20-30	Pottery	TPW	plate		2	2		BS	8		
19th+	67	C	100-110	Pottery	TPW	plate		1	1		BS	2		
19th+	67	B	100-110	Pottery	WHITE	stand		1	1	shallow stand with triangular-sectioned industrial	PR OF	27		
118/ 19th+	67	C	90-100	Pottery	CREA	tank		1	1	slipware; marbled	BS	2		
13th/14 th	68	C	60-70	Pottery	HERB1	jar		1	1		BS	6	v. abr	
117th/m 18th	68	C	90-100	Pottery	HERA7E	bowl		1	1	looks later than Newent glasshouse	R	37		
117th/e 18th	68	C	40-50	Pottery	STRE	CHP		1	1		BS	3		
117th/e 18th	68	D	70-80	Pottery	STSL	POSS?		1	1	brown-slipped	BS	3		
m16/e1 7th	68	C	40-50	CBM	HERB5	brick?		1	1		BS	17		
19th+	68	E	100-110	Pottery	NCBW	bowl		1	1		BS	29		
118th+	68	E	50-60	Pottery	ENGS	flag		1	1	stamped 'R &./Ledbury'	BS	27		

Date	Plot	Trans	Stint	Class	C name	Form	Subfabric	Nosh	No V	Description	Part	Weight	Use	Condition
119th/20th	68	D	40-50	Pottery	ENPO	insulator		1	1		BS	19		
19th+	68	E	80-90	Pottery	TPW	plate		1	1		BS	6		

Pottery (report on part 2 of the fieldwalking)

by Alan Vince

One hundred and twenty sherds of pottery, weighing 983 gm, were submitted for identification and assessment. They were recovered from ten separate fields (Table 1). The pottery ranged in date from Roman to early modern but there was an absence of wares dating between the 5th and the later 13th centuries (Table 2).

Table 1

Plot	Data	Total
07	Sherds	4
	Weight (g)	50
08	Sherds	2
	Weight (g)	2
09	Sherds	8
	Weight (g)	66
19	Sherds	28
	Weight (g)	363
21	Sherds	13
	Weight (g)	56
38	Sherds	2
	Weight (g)	4
40	Sherds	19
	Weight (g)	87
51	Sherds	17

	Weight (g)	123
64	Sherds	21
	Weight (g)	216
71	Sherds	6
	Weight (g)	16

Table 2

Plot	Data	Rom	Late Med	early post-medieval	later post-medieval	early modern	Total
07	Sherds	1		1		2	4
	Weight (g)	4		26		20	50
08	Sherds					2	2
	Weight (g)					2	2
09	Sherds					8	8
	Weight (g)					66	66
19	Sherds		2	8	4	14	28
	Weight (g)		69	139	89	66	363
21	Sherds	6	3	1			13
	Weight (g)	31	10	7			56
38	Sherds	1				1	2
	Weight (g)	2				2	4
40	Sherds		3	3	2	4	19
	Weight (g)		24	25	6	9	87
51	Sherds			1		14	17
	Weight (g)			4		111	123
64	Sherds		1	4	4	9	21
	Weight (g)		109	19	40	38	216
71	Sherds				2	4	6
	Weight (g)				4	12	16
Total Sherds		8	9	18	12	58	120
Total Weight		37	212	220	139	326	983

Romano-British

Eight sherds of Romano-British pottery were found. All were of Severn Valley ware, which was produced throughout the Roman period, although most common in the 2nd and 3rd centuries. All the sherds were very abraded and probably came from jars.

There is a concentration of finds in Pl.21 which may indicate settlement on the site or nearby. However, it is normal to find a scatter of pottery of this period throughout the Severn Valley, probably as a result of extensive manuring of fields.

Anglo-Saxon and early medieval

No sherds of Anglo-Saxon or early medieval date were found. Pottery is in fact extremely rare from any sites west of the Severn until the later 11th century with the exception of Hereford, where all the pottery found in 10th and early 11th-century levels was of types produced further east.

The lack of pottery of later 11th, 12th and early 13th centuries is, however, probably more significant since it is known that pottery was widely used in the area during these centuries.

Later medieval

Nine sherds of later medieval or early post-medieval pottery were found. They include two definite late medieval vessels: The first is a jug of Gloucester TF110 from Pl.19. This is a local ware widely distributed in the area in the later 13th and 14th centuries. The second is a foot from a large jug or bung-hole pitcher produced in a Coal Measures whiteware clay (Hereford Fabric G7) from Pl.64. Both of these sherds are sufficiently unusual to merit illustration.

The remaining sherds are of Malvern Chase glazed ware, which was used from the late 13th to the mid 16th centuries. All of the sites producing these sherds also produced definite 16th-century wares which may suggest that these examples belong to the later part of their date range.

Early Post-medieval

Eighteen sherds of earlier post-medieval date were found. They come from five sites (Pl.19, Pl.21, Pl.40, Pl.51 and Pl.64). The wares present are Cistercian ware, probably of 16th century date, Post-medieval Welsh Borderland wares (HERA7D), including examples with a

distinctive pale fabric thought to be characteristic of Upton Bishop (HERA7DL). These wares were produced from the later 16th to the middle of the 17th centuries, after which the industries moved on to produce a different range of forms, and extensive use of white slip. No examples of this later type, typified by Newent Glasshouse, were present. Single examples of Malvern Chase pink fabric (HERB5) and Frechen stoneware were present. Finally, three sherds are of a silty micaceous ware which was recently recognised at Goodrich Castle, and coded there GCP1. At Goodrich the ware appeared to have been in use at the time of the sacking of the castle in the Civil War.

Later Post-medieval

Twelve sherds of later 17th/early 18th century date were found. They come from four fields: Pl.19, Pl.40, Pl.64 and Pl.71. The wares present are Ashton Keynes ware, which is rarely found west of the Severn but may have been used briefly after the Newent Glasshouse kilns fell out of use in the middle of the 18th century; Nottingham Stoneware, which was produced from the late 17th century until the 19th century. The two sherds found are both tankards, known in early 18th century contexts in Gloucester but probably used later as well; a range of Staffordshire slipwares (press-moulded plates - STCO, mottled glazed light-bodied wares- STMO; brown stoneware - STBRS and light bodied slipware - STSL). These types all have a long life but are more likely to be 18th than 17th centuries. Finally, two sherds of Westerwald stoneware were found.

Early Modern

Fifty-eight sherds of later 18th and 19th century pottery were found. They were present on every site except for Pl.21.

Assessment

None of the pottery finds necessarily indicate settlement in the area. The finds are too sparse, too abraded and their small mean sherd size suggests that they have been in the plough zone for a considerable period. The only exceptions are the medieval sherds from Pl.19 and Pl.64 both of which are most substantial and not heavily weathered. However, both sherds are from the thickest parts of vessels and may simply have resisted erosion.

Plot	Tran s	Stint	Ware	Subfabric	Form	Sh	V	Comments	Part	Wgt (g)
07	B	140	HERA7 D		bowl	1	1	cut marks or scratches into gl	BS	26
07	C	110	R	SVW	-	1	1	v. abr	BS	4
07	C	120	TPW		cup	1	1		R	17
07	C	130	TPW		jug	1	1	polygonal vess; black ink	BS	3
08	B	90	TPW		cup	1	1		BS	1
08	E	20	TPW		plate	1	1		BS	1
09	A	80	WHITE		bowl	1	1	blue lines around rim	BS	1
09	B	70	TPW		plate	1	1	spalled	BS	2
09	B	70	WHITE		plate	1	1		BS	4
09	C	0	TPW		plate	1	1	spalled	BS	1
09	C	0	MISC	SW	FLP	1	1	oxid	BS	4
09	C	80	STCOA R		bowl	1	1	spalled	BS	7
09	C	80	ENGS		SJ	1	1	Bristol glazed ext; cylindrical body	BS	45
09	E	120	TPW		plate	1	1	spalled	BS	2
19	A	320	TPW		plate	1	1		BS	1
19	A	370	HERB4		-	1	1		BS	2
19	B	180	TPW		plate	1	1		BS	1
19	B	180	SWSG		-	1	1		BS	1
19	B	260	HERA7 D	overfired	bowl	1	1	black int gl	BS	19

Plot	Tran s	Stint	Ware	Subfabric	Form	Sh	V	Comments	Part	Wgt (g)
19	B	260	CREA		bowl	2	1		BS	2
19	B	290	TPW		plate	1	1		BS	1
19	B	360	GCP1		bowl	1	1		BS	2
19	B	360	TPW		cup	1	1		BS	2
19	B	90	MISC		FLP	1	1		BS	1
19	C	120	STCOA R		bowl	1	1		BS	18
19	C	180	HERA7 D		bowl	1	1		BS	26
19	C	180	STCOA R		bowl	1	1	glazed int & ext	BS	34
19	C	220	WHITE		-	1	1		BS	1
19	C	250	STCO		dish	1	1	EM C18th	BS	28
19	C	260	FREC		BEL	1	1		BS	16
19	C	30	GCP1		bowl	1	1	KC base	BS	43
19	C	310	GCP1		bowl	1	1	spalled	BS	11
19	C	370	CSTN		cup	1	1		BS	4
19	C	370	STCOA R		bowl	1	1		BS	2
19	C	60	AK		bowl	1	1		BS	47
19	C	A10	TPW		plate	1	1		BS	1
19	D	160	HERA7 D		bowl	1	1		BS	18

Plot	Tran s	Stint	Ware	Subfabric	Form	Sh	V	Comments	Part	Wgt (g)
19	D	190	TPW		plate	1	1	spalled	BS	1
19	D	250	GLOS1 10		jug	1	1	DR strap handle with 6 slashes	R	67
19	D	320	AK		bowl	1	1		BS	13
19	D	320	NOTS		tank	1	1		BS	1
21	B	100	R	SVW	-	1	1	Abr	BS	3
21	C	120	R	SVW	-	1	1	Abr	BS	6
21	C	21	R	SVW	-	1	1	v. abr and coated with dark concretion	BS	2
21	C	60	CBM		flat?	1	1		BS	2
21	C	80	R	SVW	-	1	1	groove around inside of base; v. abr	BS	11
21	C	80	R	SVW	-	1	1	v. abr	BS	4
21	C	80	HERB4		-	3	3	v. abr; ID?	BS	10
21	D	250	CBM		drain	1	1		BS	1
21	E	250	CBM		brick	1	1	v. abr	BS	5
21	E	250	R	SVW	-	1	1	abr	BS	5
21	E	250	HERB5		bowl	1	1	abr	BS	7
38	C	150	R	SVW	-	1	1	v. abr	BS	2
38	C	60	SELZ		bot	1	1	OR Derbs Black - leading bottle	BS	2
40	A	100	TPW		plate	1	1	abr	BS	3
40	B	30	HERB4		jug	1	1	v. abr; ID?	BS	1
40	B	90	CBM		-	1	1	v. abr	BS	1

Plot	Tran s	Stint	Ware	Subfabric	Form	Sh	V	Comments	Part	Wgt (g)
40	B	90	HERA7 D		bowl	1	1	abr	BS	9
40	C	120	HERB4		jug	1	1	mottled cugl; abr	BS	3
40	C	130	CBM		flat	2	2	abr	BS	7
40	C	80	HERB4		ridge	1	1	abr	BS	20
40	C	90	CBM		-	1	1	v. abr	BS	4
40	D	110	TPW		cup	1	1		R	1
40	D	120	ANBN		-	1	1	calcined bone	BS	1
40	D	120	CBM		flat	2	2		BS	10
40	D	120	HERA7 D		bowl	1	1	frost-shattered	BS	4
40	D	120	STMO		tank	1	1		BS	1
40	D	180	WHITE		rect dish	1	1	might be a soap dish?; lustre of similar OG painted dec	B	4
40	D	80	STBRS		tank	1	1	moulding like Westerwald	BS	5
40	E	70	HERA7 D	overfired	jar	1	1	black int glaze	BS	12
40	E	80	TPW		plate	1	1		BS	1
51	A	50	NCBW		-	1	1		BS	1
51	A	80	MISC	v. micaceous; oxid	drain	1	1	v. abr	BS	4
51	A	80	HERA7 D		bowl	1	1		BS	4
51	A	80	CREA		plate	1	1	spalled glaze	BS	3

Plot	Tran s	Stint	Ware	Subfabric	Form	Sh	V	Comments	Part	Wgt (g)
51	B	100	WHITE		-	1	1	sanitary?	BS	3
51	B	110	WHITE		-	1	1		BS	1
51	B	120	REFR		teapot?	2	1	white slipped int	BS	2
51	B	30	CREA		plate	1	1		BS	3
51	B	60	TPW		CLSD	1	1		BS	2
51	C	120	WHITE		mug	1	1		B	6
51	C	40	CBM		flat	1	1		BS	4
51	C	70	STCOA R		bowl	1	1		BS	9
51	C	80	PEAR		plate	1	1	blue feathered edge	R	1
51	D	40	CREA		plate	2	2		BS	5
51	E	50	STCOA R		bowl	1	1		B	75
64	A	120	WHITE		-	1	1	crazed	BS	9
64	A	160	HERA7 D		bowl	1	1	abr	R	4
64	A	200	HERA7 D	Upton Bishop light fabric	bowl	1	1		BS	11
64	A	200	SELZ		bot	1	1	might be a Derbs Black - leading bottle instead	BS	12
64	A	80	CBM		-	1	1	v. abr	BS	5
64	A	80	HERA7 D	highly micaceous	bowl	1	1	abr	BS	3
64	B	130	PEAR		plate	1	1	spalled	BS	1

Plot	Tran s	Stint	Ware	Subfabric	Form	Sh	V	Comments	Part	Wgt (g)
64	B	150	HERA7 D		bowl	1	1	abr	BS	1
64	B	150	WHITE		plate	1	1		BS	3
64	B	150	WHITE		plate	1	1		R	9
64	B	170	HERG7		cist/jug	1	1	DR rect foot; stabbed on inside; foot heaving chipped and slightly burnt	BS	109
64	B	90	PEAR		plate	1	1		BS	1
64	B	90	NCBW		CLSD	1	1	industrial slipware	BS	1
64	C	150	TPW		CLSD	1	1		BS	1
64	C	170	CBM		-	1	1	v. abr	BS	4
64	C	170	WEST		tank	1	1		B	9
64	C	230	CBM		-	1	1	v. abr	BS	1
64	C	230	TPW		CLSD	1	1		BS	1
64	C	30	STMO		POSS	1	1		BS	18
64	D	10	NOTS		tank	1	1	abr	B	10
64	D	50	WEST		tank	1	1		BS	3
71	A	0	TPW		plate	1	1	spalled	BS	1
71	C	280	TPW		CLSD	1	1		BS	3
71	D	270	STSL		-	2	2	brown slipped int & ext	BS	4
71	D	300	TPW		plate	1	1	spalled	BS	1
71	O	210	STCOA R		jar	1	1	v. abr	BS	7

Assessment of Glass from the Tirley to Dymock Pipeline (report on part one of the fieldwalking)

Alan Vince

Twenty four fragments of glass from sites on the Tirley to Dymock pipeline were submitted for analysis. The material came from five sites (Table 1). It was classified in terms of colour - light green, light blue and dark green - and form. Only three forms were present, tall bottles, blown vessels of the type which came into use in the middle of the 18th century and was the norm throughout the 19th century; window glass - all cylindrical blown - and waste.

Form	Plot 10	Plot 18	Plot 55	Plot 67	Plot 68	Total	
tall bot			3		1	4	
waste	1			8	3	5	17
wind			1		2	3	
Total	1	4	8	6	5	24	

The fragment from Pl.10 is probably a melted vessel of light blue glass, and is likely to be of late 18th or 19th century date and accidentally burnt in a domestic context. The fragments from Pl.18 are typical of late 18th and 19th-century domestic refuse, as are the bottle and window fragments from Pl.67. The waste from Pl.55, Pl.67 and Pl.68 includes two possible types, fragments of one or more black glass slag blocks from Pl.55 and fragments of opaque green, vesicular slag from all three sites. This material includes fragments with original rounded surfaces but in the main has been heavily abraded, removing all sharp angles. It is likely, therefore, that it was used as hardcore. Both types originated in a post-medieval glasshouse, such as existed in the 18th century at Newnham on Severn or in Gloucester in the 18th and 19th centuries, both to the south of the pipeline, and would have been sold on from those sites. The ceramic finds from all these sites (except Pl.10) include late 18th and 19th century domestic waste and building material and it is likely that the glass waste entered the sites along with this material.

Assessment of Animal Bone, Ceramic Building Material, Clay tobacco pipe, Metal, Glass, and Other Material (report on fieldwalking phase 2)

Alan Vince

Summary

A variety of classes of material were recovered from the Phase 2B fieldwalking on the line of the Tirley to Dymock pipeline. The 113 pottery finds have already been reported on and this report covers the remainder only.

Animal Bone

Three animal bones were recovered. It is highly unlikely that bone would survive for long in the ploughzone and these are therefore either recently disturbed from archaeological deposits below this zone or are modern finds, present through manuring or other rubbish disposal.

Ceramic Building Material

Unidentified

Eleven fragments were too small and abraded for identification (recorded as 'CBM'. Some of these could be seen to be brick or flat roof tile fragments and therefore of post-medieval or modern date in this area whilst the remainder might be of any date.

Daub

Nineteen fragments of 'daub' were found, in eight separate fields. None of these fragments showed definite signs of wattle impressions although several had a single flat face. The fragments from Plot 8 were the largest pieces and one of these had rounded impressions on the 'back' which look like pebble impressions. This material is reminiscent of some found at Hereford in Mid Anglo-Saxon contexts and interpreted as being remnants of an artefact type used in this area before the introduction of pottery. Sites of this period are almost impossible to detect through fieldwalking because of the lack of distinctive artefacts, and therefore Plots 7 and 8 where these finds are concentrated should be investigated further.

Medieval/post-medieval

A small number of fragments of partially glazed ridge tile were recovered, all three of Malvern Chase glazed ware (HERB4). Such tiles were used in the later medieval period (ie from the 13th century onwards) but were also produced and used into the 17th century. In two of the three cases, the ridge tile fragments come from the same plot as flat roof tiles in the same fabric (produced at Malvern Chase in the later 16th and the early 17th century). It is likely that in each case the finds are of post-medieval date. Even if they were of medieval date, however, there is evidence in the area for the reuse of medieval roof furniture on later structures.

Post-medieval

The majority of the flat roof tiles (which seem in this case to be mainly peg tiles rather than nib tiles) and bricks were produced in a fabric derived from the Mercian Mudstone (aka Keuper Marl, Code: KEUP). This variable, but often very calcareous, clay, outcrops in a narrow band running north-south parallel to and to the west of the River Severn. There appears to be considerable variation in firing temperature and texture within these tiles and it is quite likely that they come from more than one brickworks and are of different dates. Three of the bricks appear to be more regular in shape than the remainder and do not have the straw or grass impressions on their surfaces which the remaining bricks have. They are probably later in date. All are from Plot 51.

There is a concentration of post-medieval ceramic building material fragments in Plot 40 but whether this is due to the presence of a structure on or close to the site or to manuring is uncertain. The finds from this Plot include a much higher frequency of flat roof tile to brick, which might suggest that they came from a timber-framed or stone-walled structure.

Modern

A variety of ceramic building material fragments of modern date were recovered. There is a concentration of finds in Plot 19 (20 frags) with all other plots producing 7 or less fragments. No attempt to identify or classify fabrics or wares was made.

Other building material

A few fragments of concrete and plaster were found. In addition, four fragments of probable glass-making waste were found. These were probably derived from the use of this material as hardcore or metalling.

Clay tobacco pipe

Thirty two fragments of clay tobacco pipe were found. Most were small fragments of stem which were roughly classified into post-medieval and modern (ie late 18th century or later) on the basis of their bore diameter. There were no concentrations of earlier pipe fragments (Plot 67 had the highest number, 4) whilst the later fragments included ten from Plot 67

Iron

Three iron artefacts were found. Two were undatable nails (quite possibly modern) and the third was a rusted nut and bolt, of definite modern date.

Lead alloy

A single lead alloy buckle, from a belt or shoe, was found. It is probably of post-medieval date.

Glass

With the exception of a single fragment of 'onion' bottle of late 17th/early 18th-century date from Plot 40 all the glass fragments found were from tall bottles of mid 18th century or later date apart from a single fragment from a blue glass jar, probably for medicine and of modern date, from Plot 64.

Other material

Four fragments submitted as ceramic building material were identified as unworked fragments of siltstone. Two contained fossil brachiopods which suggest that they were of Silurian/Ordovician age. Rocks of this type outcrop in the vicinity (for example, May Hill in Newent) and there is no evidence that these were used as building material, although they could have formed flagstones or stone roofers.

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
5	B	150	CTP	mod	CTP	PIPE	1	1	2		C18TH/19TH FIRE BRICK OR SIMILAR?
7	A	100	CBM	unknown	KEUP	DAUB	3	3	24		18TH C SPURRED
7	A	100	CBM	pmed	KEUP	FLAT	1	1	14		
7	A	120	CBM	unknown	KEUP	DAUB	2	2	53		
7	B	120	CBM	unknown	KEUP	DAUB	6	6	31		C17TH / 18TH
7	B	120	CBM	pmed	MISC	FLAT?	1	1	9	LIGHT-COLOURED CLAY PELLETS	C18TH/19TH
7	B	140	CBM	pmed	KEUP	BRICK	1	1	7		
7	B	60	CBM	pmed	KEUP	FLAT	1	1	63		
7	B	90	CBM	pmed	KEUP	BRICK	3	3	55		
7	B	90	CBM	unknown	KEUP	DAUB	1	1	4		C19TH MOULDED DEC
7	C	110	CBM	unknown	KEUP	-	3	3	25		
7	C	110	CBM	unknown	KEUP	DAUB	1	1	2		C17TH
7	C	120	CBM	mod	MOD	FLAT	1	1	55		
7	D	120	CBM	unknown	KEUP	-	1	1	5		
8	D	40	CBM	unknown	KEUP	DAUB	4	4	260		IMPRESSIONS ON REVERSE DO NOT LOOK LIKE WATTLES; MORE

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
											LIKE ROUNDED PEBBLES?
8	D	50	CBM	unknown	KEUP	DAUB	2	2	96		BURNT
8	D	80	CBM	unknown	KEUP	DAUB	2	2	53		IMMATURE PIG? KNIFE-CUTS
8	E	120	IRON	unknown	IRON	NAIL	1	1	3		
9	A	40	IRON	mod	IRON	NUT+B OLT	1	1	68		MODERN; HEXAGONAL NUT AND BIG WASHER
9	A	50	CBM	pmed	KEUP	FLAT	1	1	76		
9	B	110	CBM	pmed	KEUP	BRICK	1	1	92		
9	C	100	CBM	mod	MOD	FLAT	2	2	177		
9	C	60	CBM	mod	MOD	FLAT	1	1	26		
9	C	80	CBM	mod	MOD	FLAT	1	1	101		
9	C	80	PMGL	mod	PMGL	BOT	1	1	5		TALL FORM;1760+
9	D	40	CBM	pmed	KEUP	DRAIN	1	1	5		
9	E	60	CBM	pmed	KEUP	BRICK	1	1	26	VERY CALC FABRIC	
9	E	60	CBM	pmed	KEUP	FLAT	1	1	20		
10	B	70	CTP	mod	CTP	PIPE	1	1	1		C18TH/19TH
10	C	80	CTP	mod	CTP	PIPE	1	1	1		C18TH/19TH
18	B	250	CTP	mod	CTP	PIPE	1	1	1		C17TH/18TH C8TH/19TH

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
18	B	290	CTP	mod	CTP	PIPE	1	1	1		MOD C8TH/19TH
18	C	270	CTP	pmed	CTP	PIPE	2	2	4		17TH/18TH C
18	C	650	CTP	mod	CTP	PIPE	1	1	2		18TH/19TH C
18	D	630	CTP	pmed	CTP	PIPE	1	1	1		17TH C
18	E	660	CTP	mod	CTP	PIPE	1	1	2		17TH C 18TH/19TH C
19	A	150	CBM	mod	MOD	FLAT	1	1	24		
19	A	180	CBM	pmed	MISC	-	1	1	1	LIGHT-FIRING INCLUSIONLESS CLAY	OVERFIRED SLIVER
19	A	270	CBM	mod	MOD	FLAT	1	1	7		
19	A	370	CBM	med/pmed	HERB4	-	1	1	2		
19	A	40	CBM	unknown	KEUP	-	1	1	1		
19	A	40	CBM	mod	MOD	FLAT	1	1	27		
19	A	60	CBM	unknown	KEUP	DAUB	4	4	33		C18TH/19TH
19	A	70	CBM	pmed	KEUP	FLAT	1	1	21		
19	B	250	CBM	pmed	KEUP	BRICK	1	1	18		
19	B	290	CBM	unknown	KEUP	DAUB	1	1	9		C18TH/19TH
19	C	100	CBM	pmed	KEUP	FLAT	1	1	76		
19	C	100	CBM	mod	MOD	FLAT	2	2	89		
19	C	120	CBM	pmed	KEUP	BRICK	1	1	121		

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
19	C	120	CBM	pmed	KEUP	FLAT	1	1	10		
19	C	120	CBM	mod	MOD	BRICK	1	1	20		
19	C	120	CBM	mod	MOD	FLAT	1	1	41		
19	C	120	CONC RETE	mod	CONC RETE	-	1	1	31		
19	C	140	CBM	mod	MOD	FLAT	1	1	36		
19	C	180	CBM	mod	MOD	FLAT	2	2	142		
19	C	200	CBM	mod	MOD	OBJECT	1	1	36		FIRE BRICK OR SIMILAR?
19	C	220	CBM	pmed	KEUP	BRICK	1	1	55		
19	C	280	CBM	pmed	KEUP	BRICK	2	2	47	VITRIFIED CORE	
19	C	310	CBM	unknown	KEUP	-	1	1	7		
19	C	310	CBM	pmed	KEUP	BRICK	1	1	15	VITRIFIED	
19	C	310	CBM	pmed	KEUP	BRICK	1	1	7		
19	C	340	CBM	pmed	KEUP	BRICK	1	1	9		
19	C	340	CBM	mod	MOD	FLAT	2	2	60		
19	C	370	CBM	pmed	KEUP	FLAT	1	1	16		
19	C	40	CBM	pmed	KEUP	FLAT	1	1	30		
19	C	60	PLAST ER	mod	PLAST ER	-	1	1	1	QUARTZ SAND AGGREGATE	
19	C	80	CBM	mod	MOD	FLAT	1	1	23		
19	D	10	CBM	pmed	KEUP	FLAT	1	1	14		

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
19	D	110	CBM	mod	MOD	FLAT	1	1	33		
19	D	120	CBM	mod	MOD	FLAT	1	1	24		
19	D	190	CBM	pmed	KEUP	BRICK	1	1	49		
19	D	190	CBM	pmed	KEUP	DRAIN	1	1	7		EXTRUDED
19	D	190	CBM	mod	MOD	FLAT	1	1	71		NIBBED
19	D	250	CBM	pmed	KEUP	BRICK	1	1	13		
19	D	250	CBM	mod	MOD	FLAT	1	1	22		
19	D	270	CBM	pmed	KEUP	FLAT	1	1	3		
19	D	270	CBM	mod	MOD	FLAT	1	1	38		
19	D	280	CBM	pmed	KEUP	BRICK	2	2	18		
19	D	280	CBM	pmed	KEUP	BRICK	1	1	160		
19	D	280	CBM	pmed	KEUP	FLAT	1	1	66		
19	D	280	CONC RETE	mod	CONC RETE	-	1	1	18		MOD
19	D	320	CBM	pmed	KEUP	BRICK	1	1	18		
19	D	330	CBM	pmed	KEUP	BRICK	1	1	33	VITRIFIED	
19	D	40	CBM	mod	MOD	FLAT	1	1	33		
19	E	0	CBM	pmed	KEUP	FLAT	1	1	14		
19	E	310	CBM	pmed	KEUP	FLAT	1	1	35		
19	E	320	CBM	pmed	KEUP	BRICK	1	1	9		
20	77703	282 69	CTP	pmed	CTP	PIPE	1	1	1		C17TH / 18TH

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
21	A	100	CBM	pmed	KEUP	FLAT	2	1	48		FROST SHATTERED
21	A	260	CBM	pmed	KEUP	BRICK	1	1	7		
21	B	100	CBM	unknown	KEUP	-	2	2	3		
21	C	100	CBM	mod	MOD	FLAT	1	1	40		
21	C	110	CBM	pmed	KEUP	FLAT	1	1	13		
21	C	140	CBM	med/pmed	HERB4	RIDGE	1	1	109		
21	C	140	CBM	pmed	KEUP	BRICK	1	1	37		
21	C	220	CBM	pmed	KEUP	FLAT	1	1	29		
21	C	250	CBM	mod	MOD	BRICK	1	1	6		
21	C	260	CBM	pmed	KEUP	BRICK	2	1	180	VITRIFIED CORE	
21	C	260	NOT AN ARTEFACT	NA	STONE?	-	1	1	28	SAND/SANDSTONE BRECCIA CEMENTED WITH BLACK IRON	UNWORKED ROCK FRAG?
21	C	40	CBM	pmed	KEUP	BRICK	1	1	3		
21	C	60	CBM	pmed	CBM	FLAT?	1	1	2		
21	C	60	CBM	unknown	HERA10	DAUB	1	1	3		C18TH/19TH
21	C	60	CBM	pmed	KEUP	FLAT	1	1	36		
21	C	80	CBM	med/pmed	HERB4	-	3	3	10		VABR; ID?
21	C	80	CBM	pmed	KEUP	DRAIN	1	1	15		

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
21	C	80	CBM	pmed	KEUP	FLAT	1	1	12		
21	C	80	CBM	mod	MOD	FLAT	2	2	48		
21	D	100	CBM	pmed	KEUP	BRICK	2	2	76		
21	D	140	CBM	pmed	KEUP	FLAT	9	9	293		POSSIBLY JUST ONE TILE?
21	D	140	CBM	mod	MOD	FLAT	1	1	30		
21	D	240	CBM	pmed	KEUP	BRICK	2	2	33		
21	D	250	CBM	pmed	CBM	DRAIN	1	1	1		
21	D	250	CBM	mod	MOD	FLAT	1	1	59		
21	E	110	CBM	med/pmed	HERB4	RIDGE?	1	1	22		
21	E	190	CBM	pmed	HERB4	FLAT	1	1	16	ONLY SST FRAGS VISIBLE SO NOT CERTAIN	
21	E	250	CBM	pmed	CBM	BRICK	1	1	5		VABR
21	E	70	CBM	mod	MOD	BRICK	1	1	88	VERY SANDY	FROGGED
23	C	10	CBM	pmed	KEUP	FLAT	2	2	52		
36	A	90	LEAD	pmed	LEAD	BUCKLE	1	1	9		D-SHAPED; POST-MED??
36	B	150	CBM	pmed	KEUP	BRICK	2	2	24		TALL FORM; 1760+
36	B	160	CBM	mod	MOD	FLAT	1	1	111		
36	B	170	CBM	mod	MOD	FLAT	1	1	8		D-SHAPED; POST-MED??
36	B	180	CBM	mod	MOD	FLAT	1	1	85	QUARTZ SAND	

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
										AGGREGATE	
36	B	210	CBM	pmed	KEUP	FLAT	1	1	30		MORTARED PEBBLE MODERN;
36	B	30	CBM	mod	MOD	BRICK	1	1	123		HEXAGONAL NUT AND BIG WASHER GRASS
36	B	50	CBM	pmed	KEUP	BRICK	1	1	199	VITRIFIED CORE	IMPRESSIONS TALL FORM; 1760+
36	C	160	CBM	mod	MOD	FLAT	1	1	43		TALL FORM; 1760+ ROUND PEG HOLE MOULDED,
36	C	20	CBM	pmed	MISC	FLAT	1	1	57	LIGHT COLOURED WITH COARSE SANDED BASE	FLUTED CYLINDRICAL FORM;19TH C COBALT BLUE
36	D	190	CBM	pmed	KEUP	DRAIN	1	1	83	ABUNDANT ROUNDED BLACK NODULES	ABR TALL FORM; 1760+
36	D	40	CBM	mod	MOD	FLAT	1	1	26		
36	E	160	ANBN	emod	ANBN	-	1	1	30		IMMATURE PIG? KNIFE-CUTS
36	E	60	CBM	pmed	KEUP	BRICK	1	1	11		TALL FORM;1760+
36	E	60	CBM	mod	MOD	BRICK	1	1	1		ONION FORM;1680-1720
37	A	10	CBM	pmed	KEUP	FLAT	1	1	50	SHELL? IN SAND	
37	A	100	CBM	pmed	KEUP	FLAT	1	1	3		

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
37	A	120	CBM	pmed	KEUP	FLAT	2	2	63		
37	A	50	CBM	mod	MOD	FLAT	1	1	32	COAL MEASURES RED	
37	B	110	CBM	pmed	KEUP	FLAT	1	1	4		
37	B	150	CBM	pmed	KEUP	FLAT	1	1	12		
37	B	30	NOT AN ARTEFACT	NA	STONE	-	1	1	11	SILURIAN SHALE WITH BRACHIOPOD	
37	B	80	CBM	pmed	KEUP	FLAT	2	2	34		
37	C	100	CBM	pmed	KEUP	FLAT	2	2	9		
37	C	120	CBM	pmed	KEUP	FLAT	3	3	125	ONLY SST FRAGS VISIBLE SO NOT CERTAIN	
37	D	140	CBM	pmed	KEUP	FLAT	1	1	7		
37	D	140	CBM	mod	MOD	FLAT	1	1	15	COAL MEASURES RED ABUNDANT SST SAND AND KEUP CLAY PELLETS NO IGNEOUS	ID?
37	D	70	CBM	pmed	KEUP	FLAT	1	1	25		
37	D	80	CBM	pmed	KEUP	FLAT	3	3	18		
37	E	70	CBM	pmed	KEUP	FLAT	2	2	64		
38	A	170	CBM	pmed	KEUP	FLAT	1	1	7		

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
38	A	180	CBM	pmed	KEUP	FLAT	1	1	43		SQUARE PEG HOLE
38	A	70	CBM	pmed	KEUP	FLAT	2	2	5	SILURIAN SHALE WITH BRACHIOPOD	
38	A	80	CBM	unknown	KEUP	-	2	2	6		
38	B	10	CBM	pmed	KEUP	FLAT	1	1	42	SILURIAN SHALE WITH BRACHIOPOD	NIBBED
38	B	100	CBM	med/pmed	HERB4	RIDGE	1	1	14	ABUNDANT SST SAND AND KEUP CLAY PELLETS NO IGNEOUS	ID?
38	B	120	CBM	unknown	KEUP	DAUB	3	3	13		C18TH/19TH
38	B	120	CBM	pmed	KEUP	DRAIN	1	1	46		EXTRUDED
38	B	80	CBM	pmed	KEUP	FLAT	4	4	253		
38	B	90	CBM	pmed	KEUP	BRICK	1	1	10		
38	C	100	CBM	pmed	KEUP	FLAT	2	2	61	SAND/SANDSTONE BRECCIA CEMENTED WITH BLACK IRON	UNWORKED ROCK FRAG?
38	C	120	CBM	pmed	KEUP	BRICK	1	1	5		
38	C	60	CBM	pmed	KEUP	FLAT	1	1	9		
38	C	60	CBM	mod	MOD	FLAT	1	1	49		
38	C	90	CBM	pmed	KEUP	FLAT	1	1	31	SILTSTONE	

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
38	D	160	CBM	unknown	KEUP	DAUB	1	1	29		C18TH/19TH;SPUR RED MOULDED DEC
38	D	50	CBM	pmed	KEUP	FLAT	1	1	18		V ABR
38	E	170	CBM	pmed	KEUP	FLAT	1	1	13	SAMIAN	VERY ABRADED RIM
38	E	170	CBM	pmed	KEUP	FLAT	1	1	13		
38	E	90	CBM	pmed	KEUP	FLAT	1	1	18		
40	A	0	CBM	pmed	HERB4	FLAT	1	1	32		
40	A	0	CBM	unknown	KEUP	-	3	3	18		MOD
40	A	120	CTP	mod	CTP	PIPE	1	1	1		C18TH/19TH
40	A	160	CBM	pmed	KEUP	BRICK	1	1	82	VITRIFIED	
40	A	160	CBM	pmed	KEUP	FLAT	1	1	41	LIGHT COLOURED VARIGATED	
40	A	30	CBM	pmed	KEUP	BRICK	1	1	14		
40	A	60	CBM	pmed	KEUP	PANT	1	1	21	VITRIFIED CORE	GRASS IMPRESSIONS
40	A	90	CBM	unknown	KEUP	-	1	1	7	LIGHT COLOURED	
40	B	20	CBM	pmed	KEUP	FLAT	2	2	15		
40	B	20	CTP	pmed	CTP	PIPE	1	1	4		C17TH
40	B	30	CBM	pmed	KEUP	FLAT	1	1	22		
40	B	60	CBM	pmed	HERB4	FLAT	1	1	96		
40	B	60	CBM	pmed	KEUP	FLAT	2	2	16		

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
40	B	90	CBM	unknown	CBM	-	1	1	1		VABR
40	C	110	CBM	pmed	KEUP	FLAT	2	2	19		
40	C	120	CBM	pmed	HERB4	FLAT	1	1	17		
40	C	120	CBM	pmed	KEUP	FLAT	3	3	22		
40	C	130	CBM	pmed	CBM	FLAT	2	2	7		ABR
40	C	130	CBM	pmed	KEUP	FLAT	3	3	7		
40	C	140	CBM	unknown	KEUP	-	2	2	8		
40	C	140	CBM	mod	MOD	BRICK	1	1	18		
40	C	140	CBM	mod	MOD	BRICK	1	1	76	ABUNDANT CLAY PELLETS;BLACK CORE	FROGGED
40	C	150	CBM	unknown	KEUP	-	1	1	3		
40	C	150	CBM	pmed	KEUP	FLAT	1	1	53		MOD
40	C	40	CBM	pmed	KEUP	BRICK	1	1	69		
40	C	40	CBM	pmed	KEUP	FLAT	2	2	109		
40	C	50	CBM	pmed	KEUP	BRICK	1	1	59		
40	C	50	CBM	pmed	KEUP	FLAT	3	3	53		
40	C	50	CBM	mod	MOD	FLAT	1	1	46		
40	C	60	CBM	pmed	HERB4	FLAT	1	1	9		
40	C	60	CBM	pmed	KEUP	FLAT	5	5	68		
40	C	70	CBM	pmed	KEUP	FLAT	1	1	58		

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
40	C	70	IRON	unknown	IRON	NAIL	1	1	2		
40	C	80	CBM	pmed	HERB4	FLAT	1	1	37		IMPRESSIONS ON REVERSE DO NOT LOOK LIKE WATTLES; MORE LIKE ROUNDED PEBBLES?
40	C	80	CBM	med/pmed	HERB4	RIDGE	1	1	20		ABR SQUARE PEG HOLE
40	C	90	CBM	unknown	CBM	-	1	1	4		V ABR
40	C	90	CBM	pmed	HERB4	FLAT	1	1	25		
40	C	90	CBM	pmed	KEUP	BRICK	2	2	124		
40	C	90	CBM	pmed	KEUP	FLAT	3	3	45		
40	C	90	CBM	mod	MOD	FLAT	1	1	10		
40	D	110	CBM	pmed	KEUP	FLAT	3	3	35		
40	D	120	ANBN	emod	ANBN	-	1	1	1		CALCINED BONE
40	D	120	CBM	pmed	CBM	FLAT	2	2	10		NIBBED
40	D	120	CBM	pmed	KEUP	FLAT	5	5	67		
40	D	120	CBM	pmed	KEUP	FLAT	1	1	25	LIGHT-COLOURED	ABR
40	D	120	CBM	mod	MOD	FLAT	1	1	23		
40	D	180	CBM	pmed	KEUP	FLAT	2	2	8		
40	D	20	CBM	pmed	KEUP	FLAT	2	2	26		
40	D	40	CBM	pmed	HERB4	FLAT	1	1	28		

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
40	D	60	CBM	pmed	HERB4	FLAT	1	1	35		
40	D	70	ANBN	emod	ANBN	-	1	1	1		BURNT
40	D	70	CBM	pmed	HERB4	FLAT	1	1	98		
40	D	70	CBM	pmed	KEUP	FLAT	2	2	115		
40	D	70	PMGL	mod	PMGL	BOT	1	1	44		TALL FORM;1760+
40	D	80	CBM	pmed	HERB4	FLAT	1	1	11	VITRIFIED	
40	D	80	CBM	pmed	KEUP	BRICK	1	1	31		
40	D	80	CBM	pmed	KEUP	FLAT	1	1	23		
40	D	80	CBM	pmed	KEUP	FLAT	2	2	38		
40	D	80	CBM	mod	MOD	FLAT	1	1	36		
40	E	10	CBM	unknown	KEUP	-	3	3	10		
40	E	10	CBM	pmed	KEUP	BRICK	1	1	38		MOD
40	E	120	CBM	mod	MOD	FLAT	1	1	21		
40	E	30	CBM	unknown	KEUP	DAUB	1	1	21		C18TH/19TH
40	E	30	CBM	pmed	KEUP	PANT	1	1	2		
40	E	50	CBM	pmed	KEUP	FLAT	2	2	114		ROUND PEG HOLE
40	E	60	CBM	pmed	KEUP	FLAT	1	1	95	VITRIFIED CORE	
40	E	80	PMGL	pmed	PMGL	BOT	1	1	36		ONION FORM;1680-1720
51	A	110	CBM	unknown	KEUP	DAUB	2	2	5		C17TH
51	A	120	CBM	pmed	KEUP	BRICK	2	2	39		

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
51	A	130	PMGL	mod	PMGL	BOT	1	1	13		TALL FORM;1760+
51	A	80	CBM	pmed	KEUP	BRICK	1	1	4		
51	A	80	CBM	pmed	MISC	DRAIN	1	1	4	V MICACEOUS;OXID	V ABR
51	B	10	CBM	pmed	KEUP	BRICK	1	1	36		MOD
51	B	100	CBM	pmed	KEUP	BRICK	2	2	66		
51	B	100	CBM	pmed	KEUP	FLAT	4	4	32		
51	B	110	CBM	pmed	KEUP	FLAT	1	1	47		
51	B	120	CBM	mod	MOD	BRICK	1	1	11		
51	B	40	PMGL	pmed/mod	PMGL	WASTE	2	2	39		PEBBLES
51	B	70	CBM	pmed	MISC	OBJECT	1	1	5	FINE PIPECLAY WITH CUBIC VOIDS	NO IDEA WHAT THIS COULD BE!
51	B	90	CBM	pmed	KEUP	FLAT	1	1	8		
51	C	100	CBM	pmed	KEUP	BRICK	1	1	54		
51	C	40	CBM	pmed	CBM	FLAT	1	1	4		
51	C	40	CBM	pmed	KEUP	FLAT	1	1	8		
51	C	60	CBM	pmed	KEUP	FLAT	1	1	43		
51	C	70	CBM	pmed	KEUP	FLAT	2	2	44		
51	C	70	PMGL	pmed/mod	PMGL	WASTE	1	1	16		MORTARED PEBBLE

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
51	C	80	CBM	pmed	KEUP	FLAT	1	1	61		
51	C	80	PMGL	pmed/mo d	PMGL	WASTE	1	1	6		MORTARED PEBBLE
51	C	90	CBM	pmed	KEUP	FLAT	1	1	12	VARIAGATED CALC BODY	
51	D	110	CBM	unknown	KEUP	DAUB	1	1	1		
51	D	110	AN ARTEF ACT	NA	STONE	-	1	1	16	SILTSTONE	
51	D	110	PMGL	mod	PMGL	BOT	1	1	11		TALL FORM;1760+
51	D	120	CBM	pmed	KEUP	BRICK	1	1	41		MOD
51	D	120	CBM	pmed	KEUP	DRAIN	1	1	30		
51	D	130	CBM	pmed	KEUP	BRICK	2	2	54		MOD
51	E	100	CBM	mod	MOD	BRICK	1	1	103		
51	E	70	CBM	pmed	KEUP	FLAT	1	1	8		ABR
51	E	70	PMGL	pmed/mo d	PMGL	WASTE	1	1	1		
64	A	100	CBM	pmed	KEUP	FLAT	2	2	57		
64	A	130	CBM	pmed	KEUP	BRICK?	1	1	4		
64	A	130	CBM	pmed	KEUP	FLAT	1	1	1		
64	A	190	CBM	mod	MOD	FLAT	1	1	30		
64	A	200	CBM	unknown	KEUP	-	1	1	1		

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
64	A	80	CBM	unknown	CBM	-	1	1	5		V ABR
64	A	80	CBM	pmed	KEUP	BRICK	4	4	33		
64	B	130	CBM	unknown	KEUP	DAUB	1	1	2		
64	B	140	CBM	pmed	KEUP	FLAT	1	1	9		
64	B	150	CBM	unknown	KEUP	-	1	1	1		
64	B	150	CTP	mod	CTP	PIPE	1	1	5		C19TH MOULDED DEC
64	B	160	CBM	pmed	KEUP	FLAT	1	1	45		
64	B	160	CBM	mod	MOD	FLAT	1	1	43		
64	B	180	CBM	unknown	KEUP	DAUB	1	1	2		
64	B	180	CBM	pmed	KEUP	FLAT	1	1	9		
64	B	230	CBM	pmed	KEUP	FLAT	1	1	18		
64	B	290	CBM	pmed	KEUP	BRICK	1	1	17		
64	B	290	CBM	unknown	KEUP	DAUB	1	1	4		
64	B	290	CBM	pmed	KEUP	FLAT	2	2	96		
64	B	40	CBM	pmed	KEUP	FLAT	4	1	151		FROST SHATTERED
64	B	60	CBM	pmed	KEUP	FLAT	1	1	39		
64	B	60	CBM	pmed	KEUP	FLAT	2	2	49		
64	B	80	CBM	mod	MOD	FLAT	1	1	90		
64	B	90	NOT AN	NA	STONE	-	1	1	16	SILURIAN SHALE	

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
			ARTEF ACT							WITH BRACHIOPOD	
64	C	150	CTP	pmed	CTP	PIPE	1	1	1		
64	C	170	CBM	unknown	CBM	-	1	1	4		V ABR
64	C	200	PMGL	mod	PMGL	BOT	1	1	18	COBALT BLUE	MOULDED, FLUTED CYLINDRICAL FORM; C19TH
64	C	230	CBM	unknown	CBM	-	1	1	1		VABR
64	C	80	PMGL	mod	PMGL	BOT	1	1	13		TALL FORM;1760+
64	C	90	CTP	pmed	CTP	PIPE	1	1	7		C18TH SPURRED
64	D	10	CBM	pmed	KEUP	BRICK	1	1	38		
67	A	140	CTP	mod	CTP	PIPE	1	1	2		C18TH/19TH
67	B	130- 140	CTP	pmed	CTP	PIPE	1	1	6		C17TH
67	B	90	CTP	mod	CTP	PIPE	1	1	2		C18TH/19TH
67	C	100	CTP	mod	CTP	PIPE	1	1	1		C18TH/19TH
67	C	90	CTP	pmed	CTP	PIPE	3	3	2		C17TH/18TH
67	D	140	CTP	mod	CTP	PIPE	1	1	1		C18TH/19TH
67	D	170	CTP	mod	CTP	PIPE	1	1	1		C18TH/19TH; SPURRED MOULDED DEC
67	E	100	CTP	mod	CTP	PIPE	1	1	1		C18TH/19TH
67	E	110	CTP	mod	CTP	PIPE	3	3	11		C18TH/19TH

Plot	Trans	Stint	Class	Period	C name	Form	Nosh	No V	Weight	Subfabric	Description
67	E	80	CTP	mod	CTP	PIPE	1	1	4		C18TH/19TH; MOULDED DEC
71	A	80	CBM	pmed	KEUP	DRAIN	1	1	2	VERY CALCAREOUS	
71	B	80	CBM	pmed	KEUP	FLAT	1	1	30		
71	C	70	CBM	pmed	KEUP	BRICK	1	1	34		
71	D	100	CBM	pmed	KEUP	BRICK	1	1	185		
71	D	100	CBM	mod	MOD	FLAT	1	1	118		
71	D	110	CBM	pmed	KEUP	BRICK	1	1	185		
71	D	280	CBM	pmed	KEUP	FLAT	1	1	11		ABR
71	D	90	CBM	pmed	KEUP	DRAIN	1	1	17	LIGHT COLOURED VARIGATED	
71	E	100	CBM	pmed	KEUP	BRICK	1	1	35		
02a	D	60	CTP	pmed	CTP	PIPE	1	1	1		C17TH/18TH
02a	E	0	CTP	pmed	CTP	PIPE	1	1	1		C17TH

Slag

by Jane Cowgill

Introduction

The route of the short pipeline in Gloucestershire was fieldwalked by Network Archaeology in advance of its construction. Each field through which the pipeline passed was given a Plot Number and slag was recovered from ten of these plots. The route passes very close to the Forest of Dean, a major centre of iron production during the Romano-British period.

Recording Methodology

The small slag assemblage from the site has been identified and recorded on *pro forma* recording sheets. Each individual piece of hand collected slag was visually examined and identified solely on morphological grounds, sometimes with the aid of a x10 binocular microscope. The records were entered directly into Table 1 below. A note of probable fuel type has been recorded when fragments were incorporated within the slags or imprints identifiable.

Discussion

The slag collected in Plots 8, 19, 21, 40 and 67 represent a very low level scatter of slag in the fields, which would be expected through casual discard and perhaps manuring activities. The hearth bottom in Plot 40 may have been thrown away by a farrier after reshoeing a farm horse for example, whereas the probably relatively recent slags from Plot 21 may have been added to the field to 'sweeten' it. Blast furnace and other industrial slags were sometimes crushed and then scattered over fields as 'sweetings' to improve the fertility of the fields. The tap slags from Plots 36 (36g), 51 (see below), 55 (213g) and 71 (30g) are of more significant interest, in particular those from 51. Tap slags are only generated during the production of metallic iron from iron ores in slag tapping shaft furnaces and therefore these slags indicate that iron was produced in or close to these four fields probably during the Late Iron Age to Early medieval period.

The largest assemblage was recovered from Plot 51 and consists of 26 pieces of iron smelting slag (782g), three of iron smithing slag (218g) with only seven small fragments of probable recent slag (59g) and two indeterminate pieces (25g). The majority was collected in Transect C although a reasonable quantity also comes from B (Table 1 below). This is a very small assemblage if there is an iron smelting site within this field but the slag is extremely abraded (almost rounded and pebble-like in appearance) which may have made recognition of the pieces difficult during fieldwalking. It also suggests that it has been severely plough damaged over a long period of time and this could have dispersed the expected slag concentration, around the furnace site, over quite a wide area. There is, however, one piece in a remarkably fresh condition (the channel/finger slag from C60; weight 44g). This piece has a fairly thin fragile surface (for slag) and the characteristic frequent voids within its matrix, unlike the more dense solid pieces of tap slag. The fact that it is in such good condition suggests that it has only recently been disturbed from a possible slag heap below the plough soils. An area close to C60 should therefore be considered as the possible location of an iron smelting site, where the furnaces may be located.

The small assemblage of iron smithing slag may be waste products from either primary smithing (the consolidation of the bloom into stock iron) or secondary smithing (the

manufacture, repair or recycling of iron objects). If they represent the former they are probably associated with the iron production industry but unfortunately the by-products of the two different processes cannot be distinguished by morphology alone.

Slag has very few secondary uses and due to its weight and blockiness is difficult to transport. The presence of smelting slags in any quantity are therefore considered to be a good indicator that there is an iron production site in the vicinity. The quantity of slag anticipated on these sites is much larger than the amount collected during the fieldwalking, but there is a complicating factor in the Forest of Dean. Many of the early bloomery slag heaps were exploited in the 19th century as very good ore sources for the more efficient blast furnaces then being operated and this is known to have almost completely removed all traces of some production sites.

During the excavation of the pipeline easement, the areas from which smelting slags were recovered during the fieldwalking stage, should be carefully watched incase evidence for furnaces or any other associated activity connected with the production of iron is uncovered. Plot 51 warrants more attention and should be considered a suitable candidate for evaluation after perhaps some additional fieldwalking. It is also important that this information is recorded on the local SMR in case any further development occurs in these areas.

Table 1. The Catalogue of the slag from the Tirley to Dymock Pipeline.

Plot	Transect Ref.	Type	Count	Weight	Craft/Ind.	Comments
PL8	C0	HB	1		FESMITH	Coal fuel; pmed/modern.
PL8	C0	SSL	6		FESMITH	Coal fuel; pmed/modern.
PL19	A180	SLAG	2	4g	FESMITH	
PL19	D270	SLAG	1	5g	FESMITH	Coal fuel.
PL21	C250	SLAG	2	12g		Very glassy; coal fuel; pmed/modern; (if same source as D240 not blast furnace slag); sweetings?
PL21	C260	SLAG	3			Very glassy; coal fuel; pmed/modern; (if same source as D240 not blast furnace slag); sweetings?
PL21	C260	HB	1		FESMITH	Very abraded; large and dense; charcoal fuel; just possibly a fragment of LIA or Saxon slag block.
PL21	D240	SLAG	1	3g		Very glassy; coal fuel; pmed/modern; (not blast furnace slag); sweetings?
PL21	D250	TARMAC	1	35g		
PL36	75846 28403	TAP	1	81g	FESMEL T	Abraded; dense; moulded side – height 30mm.
PL40	B310-320	HB	1	109g	FESMITH	Abraded; encrusted; dense.
PL40	D80	TAP	1	40g	FESMEL T	Abraded; dense.
PL51	A100	SLAG	1	7g	FESMITH	Coal fuel; pmed/modern
PL51	B40	SLAG	1	41g	FEWKIN G	Very, very abraded; probably tap; dense.
PL51	B70	TAP	1	7g	FESMEL T	Abraded; dense.
PL51	B90	TAP	2	38g	FESMEL T	Abraded; dense.
PL51	B100	SLAG	1	2g	FEWKIN G	

PL51	B110	COAL	1	18g		Slagged.
PL51	B110	TAP	1	3g	FESMEL T	
PL51	B120	HB	1	112g	FESMITH	Very, very abraded. LIA – medieval.
PL51	C10	TAP	1	28g	FESMEL T	Abraded; dense.
PL51	C20	CLINKER	1	1g		
PL51	C30	TAP	1	8g	FESMEL T	Abraded; dense.
PL51	C30	SLAG	1	46g	FEWKIN G	Abraded; probably FESMELT
PL51	C60	TAP	1	11g	FESMEL T	Very abraded; dense.
PL51	C60	CHAN/FIN G	1	44g	FESMEL T	Fresh, many voids – condition surprisingly good.
PL51	C70	TAP	4	141g	FESMEL T	Charcoal fuel; abraded; dense.
PL51	C80	TAP	1	144g	FESMEL T	Abraded; dense.
PL51	C80	CHAN	1	44g	FESMEL T	Abraded; dense.
PL51	C90	TAP	4	51g	FESMEL T	Abraded; dense.
PL51	C90	SLAG	2	106g	FESMITH	Abraded; probably HBs; charcoal fuel; ?different smiths.
PL51	C90	SLAG	1	21g		Hearth lining attached; green and glassy; totally vitrified ceramic?
PL51	C100	TAP	2	53g	FESMEL T	Very, very abraded; dense.
PL51	C100	COAL	1	29g		Slagged.
PL51	C110	COAL	1	2g		
Plot	Transect Ref.	Type	Count	Weig ht	Craft/Ind.	Comments

PL51	C110	TAP	1	6g	FESMEL T	Abraded; dense.
PL51	C110	SLAG	1	3g	FEWKIN G	
PL51	C120	COAL	1	4g		
PL51	C120	SLAG	1	4g	FESMITH	?SSL; coal fuel, probably pmed/modern.
PL51	C130	SLAG	1	28g	FESMITH	?HB; coal fuel; fresh; probably pmed/modern.
PL51	C140	COAL	2	8g		
PL51	C140	TAP	1	5g	FESMEL T	Abraded; dense.
PL51	C140	SLAG	3	8g	FESMITH	Coal fuel; probably pmed/modern.
PL51	D70	TAP	1	5g	FESMEL T	Abraded; dense.
PL51	E0	BLAST	1	12g		
PL51	E40	COAL	1	11g		Slagged.
PL51	E40	CLINKER	1	12g		
PL51	E50	TAP	1	107g	FESMEL T	Abraded; dense.
PL55	B160-170	TAP	1	107g	FESMEL T	Abraded; dense; bubbly base; large flows.
PL55	B230-240	TAP	1	65g	FESMEL T	No top/base; bubbly base.
PL55	D110-120	TAP	1	29g	FESMEL T	Thin flows; sandy base.
PL55	E220-230	SLAG	1	12g		Abraded; probably tap; dense.
PL64	C170	TAP	1	15g	FESMEL T	Very abraded; dense
PL67	A190-200	STONE	1	141g		?Burnt rounded river pebble; potboiler?
PL67	B90-100	SLAG	1	45g		Pmed/modern industrial waste.
PL67	C60-70	IRONST	1	105g		Natural.
PL67	E110-120	SLAG	1	2g		Fuel ash slag.

PL71	C310	TAP	1	30g	FESMEL T	Abraded; dense.
------	------	-----	---	-----	-------------	-----------------

CODES USED IN THE ABOVE TABLE:

BLAST	Slag from a blast furnace.
CHAN	Channel slag; tapped slag that cooled in the tapping channel.
FESMELT	Evidence for iron smelting (production).
FESMITH	Evidence for iron smithing (primary or secondary).
FEWKING	Evidence for either iron smelting or smithing.
FING	Finger slag that may have cooled in the furnace air hole.
HB	Plano-convex slag accumulation, commonly known as a hearth bottom, waste product of iron smithing.
PMED	Post Medieval.
SSL	Smithing slag lump a waste product of iron smithing.

Jane Cowgill©

September 2001

Updated January 2002

Appendix F

SUMMARY TABLE OF FIELDWALKING, RECONNAISSANCE AND GEOPHYSICAL RESULTS

Summary Table of Fieldwalking, Reconnaissance and Geophysical Survey Results

Plot No	Cat	Figure No	NGR	Description	Impact	Recommendations
6	D	2	380695 229016	Localised, raised susceptibility values correspond to sparse magnetic anomalies inc' ?pit: ?remains of early settlement activity	D-unc	Trench evaluation in advance of construction
7	E	2	380475 228860	low density concentration of possible mid Anglo-Saxon daub	D-unc	Detailed monitoring during the course of a watching brief
8	E	2	380350 228845	low density concentration of possible mid Anglo-Saxon daub	D-unc	Detailed monitoring during the course of a watching brief
9	D	2	380240 228750	Single unabraded pottery sherd: ?Iron Age occupation - not corroborated by geophysical survey	D-unc	Trench evaluation in advance of construction
18	D	2	379016 228196	areas of magnetic activity correspond with raised susceptibility, but there were no distinct features.	D-unc	Trench evaluation in advance of construction
19-20	D	2	378320 227980	geophysical anomalies of some isolated linear features, A large sherd of late med pottery in plot 19, a low density scatter of post-medieval brick in plot 20	D-unc	Trench evaluation in advance of construction
20/21	D	2	378200 228120	Corse /Staunton parish boundary (DBA:AZ)	D-min	Detailed monitoring during the course of a watching brief, with provision for environmental sampling
21	D	2	378055 228123	Raised susceptibility readings & small cluster of magnetic anomalies, small concentration of Ro pot - ?manuring	D-unc	Trench evaluation in advance of construction
28-29	D	2	376890 228080	EW: ?linear ditch - ?enclosure, but no corresponding survey response.	D-unc	Trench evaluation in advance of construction
32	D/E	2	376435 228167	Cluster of small magnetic anomalies 100m S. Of Ragman's Castle (SMR 20731.1)	D-unc	Trench evaluation in advance of construction
32/33	D	2	376280	Staunton/Upleadon parish	D-min	Detailed

			228240	boundary (DBA:BO)		monitoring during the course of a watching brief, with provision for environmental sampling
36	E	2	375731 228236	One piece of tap slag from field with low ground visibility: ?nearby iron production in Iron Age or Medieval period. One isolated geophysical anomaly	Unc	Detailed monitoring during the course of a watching brief
39	E	3	375179 228434	Group of weak magnetic anomalies in 'Brick Fields' (DBA:BZ)	D-unc	Detailed monitoring during the course of a watching brief
40	D	3	374937 228683	Moderately dense brick & tile scatter (late C16th or later) & small magnetic anomalies in 'Brick Fields' (DBA:BZ), c. 50m south of Pauntley DMV (SMR 05312.1-3), and near a railway embankment, but could relate to former orchards.	D-unc	Trench evaluation in advance of construction
41	D	3	374261 228670	2-3 groups magnetic anomalies & linear with some susceptibility variation	D-unc	Trench evaluation in advance of construction
42/43	D	3	373900 228620	Pauntley and Newent parish boundary	D-min	Restriction of working width and detailed monitoring during the course of a watching brief
46-48	E	3	372948 228434	Strong, but very random magnetic anomalies: ?natural	D-unc	Detailed monitoring during the course of a watching brief
47	D	3	372948 228434	Strong linear magnetic anomalies	D-min	Trench Evaluation in advance of construction
51	D	3	372560 228840	moderate density of iron smelting slag, geophysical anomalies combined with raised susceptibility	D-unc	Further, more detailed walkover in order to assess need for trench evaluation
52	E	3	372390 229027	Strong, but random magnetic anomalies: ?natural	D-unc	Detailed monitoring during the course

						of a watching brief
52/53	D	3	372420 229120	Pauntley and Newent parish boundary		Restriction of working width and Detailed monitoring during the course of a watching brief
54	E	3	372293 229271	Random magnetic anomalies: ?natural	D-unc	Detailed monitoring during the course of a watching brief
55	E	3	372044 229355	Four pieces of tap slag: ?nearby iron production in Iron Age or Medieval period. Strong magnetic anomalies - probably recent/natural, but possibly industrial	D-unc	Detailed monitoring during the course of a watching brief
56	E	3	371791 229427	Random magnetic anomalies: ?natural	D-unc	Detailed monitoring during the course of a watching brief
58	E	3	371482 229555	Random magnetic anomalies: ?natural	D-unc	Detailed monitoring during the course of a watching brief
58/59	D	3	371400 229570	Pauntley and Dymock parish boundary		Restriction of working width and detailed monitoring during the course of a watching brief
68	E	3	369982 230417	Random magnetic anomalies: ?natural	D-unc	Detailed monitoring during the course of a watching brief
69	E	2	377406 228053	Sub-circular depression: ?former pond/pit	D-unc	Detailed monitoring during the course of a watching brief
71	E	2	377187 227880	Sub-circular, wet hollow: pond.	D-unc	Detailed monitoring during the course of a watching brief
71	E	2	377187 227880	Line of mature oak trees: former field boundary - corresponds to DBA	D-min	Detailed monitoring during the course

						of a watching brief
72	E	2	376926 227855	Line of mature oak and ash trees along linear depression: former field boundary - corresponds to DBA	D-min	Detailed monitoring during the course of a watching brief

Appendix G

FIGURES 1 - 19

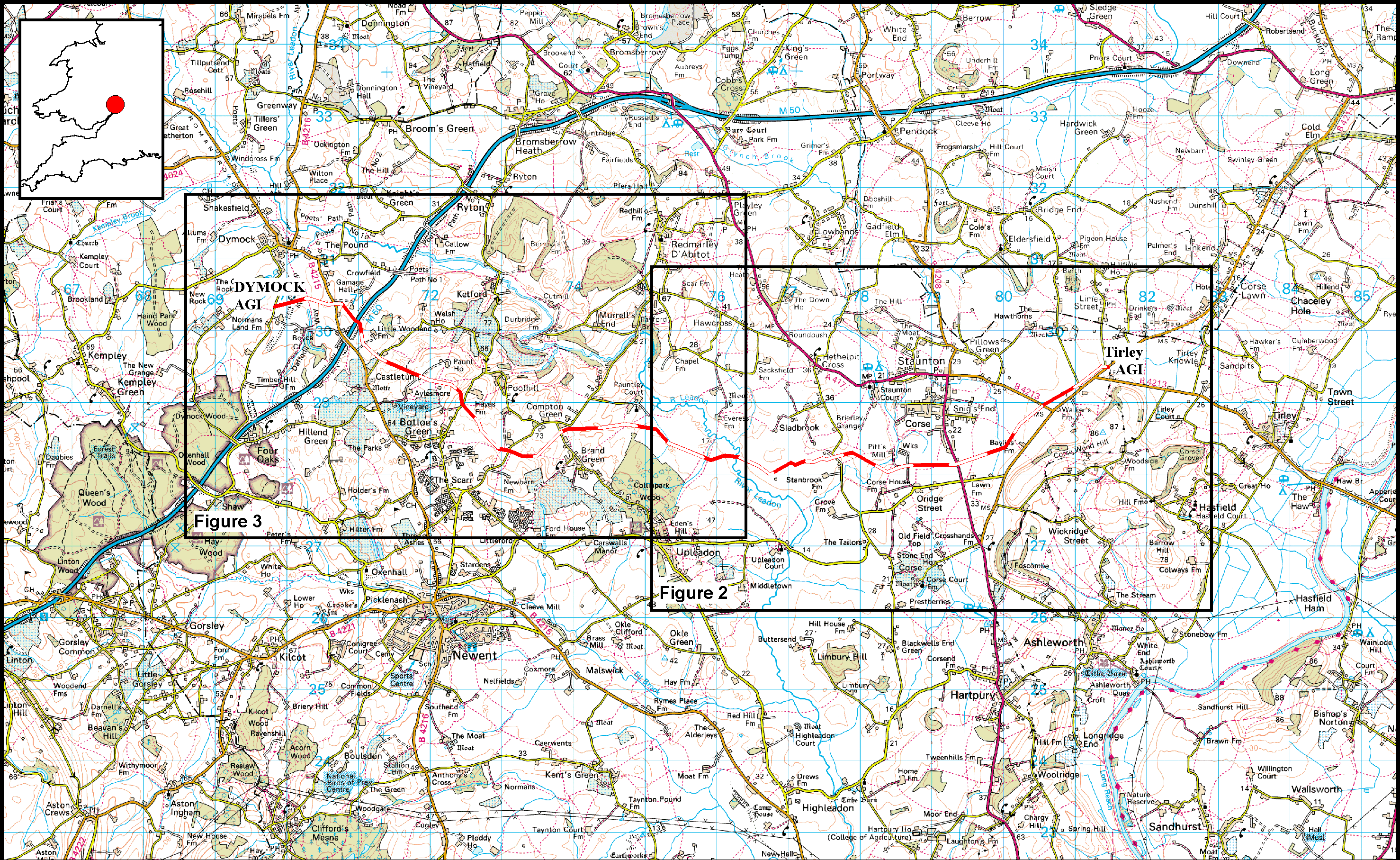


Figure 1: Proposed Tirley to Dymock Pipeline and location of Figures 2 and 3

[Reproduced at 1:50 000 scale from Ordnance Survey Data with permission of the Controller of Her Majesty's Stationery Office.

(c) Crown Copyright reserved. Licence number AL 52256A]

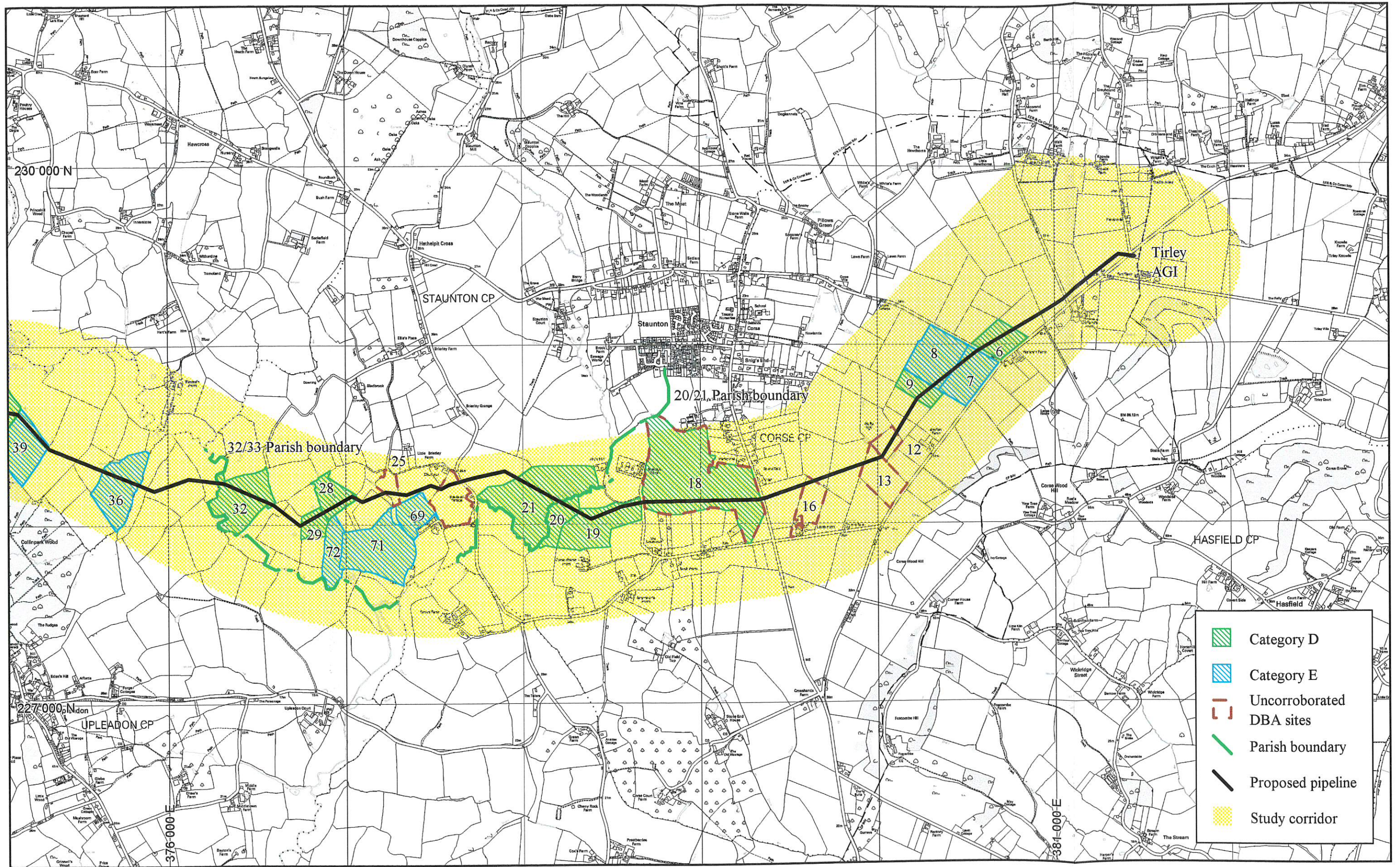


Figure 2: Proposed Tirley to Dymock pipeline and location of plots containing archaeology observed during field and geophysical surveys

[Reproduced at 1:20 000 scale from Ordnance Survey Data with permission of the Controller of Her Majesty's Stationery Office. © Crown Copyright reserved. Licence number AL 52256A]

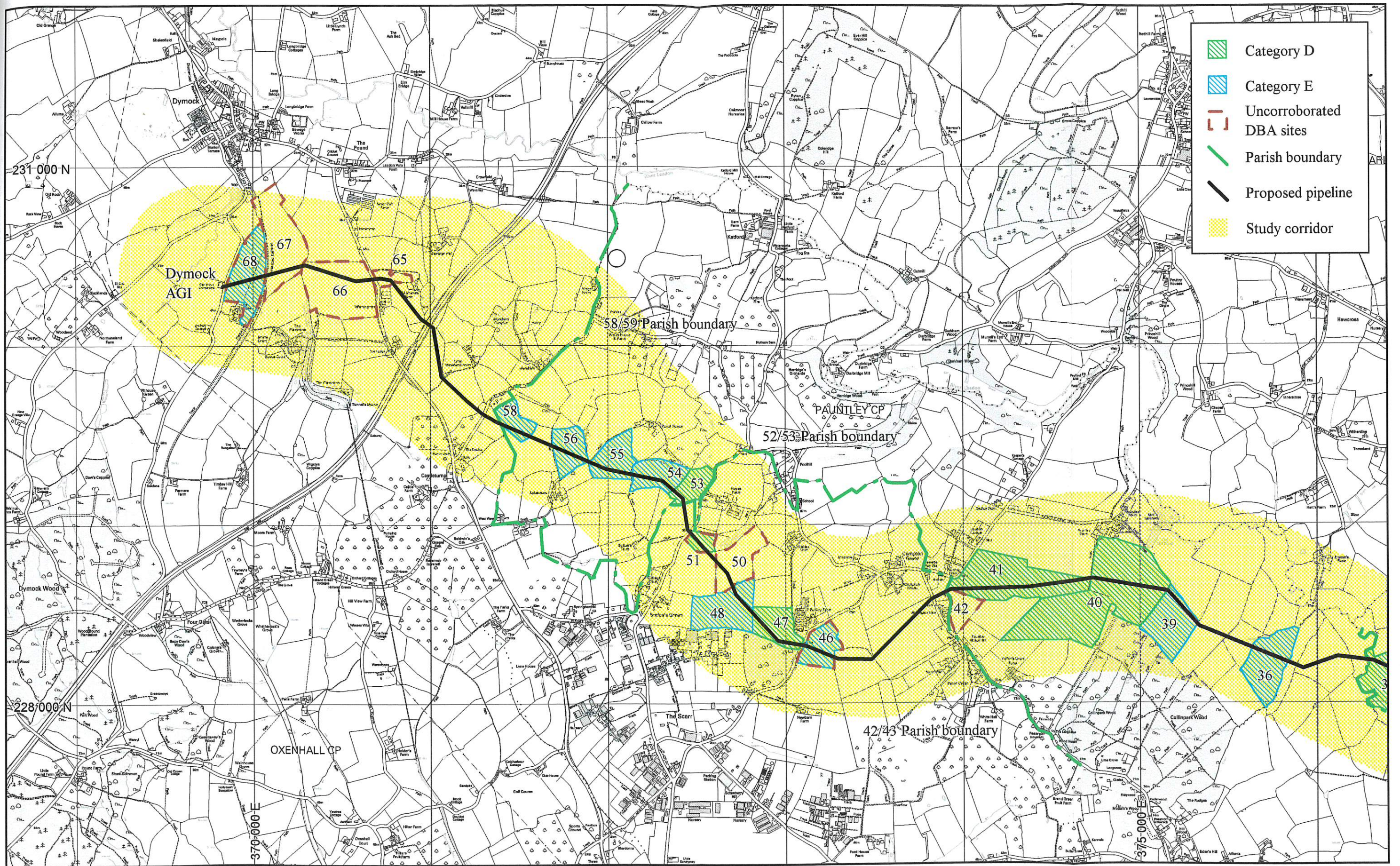
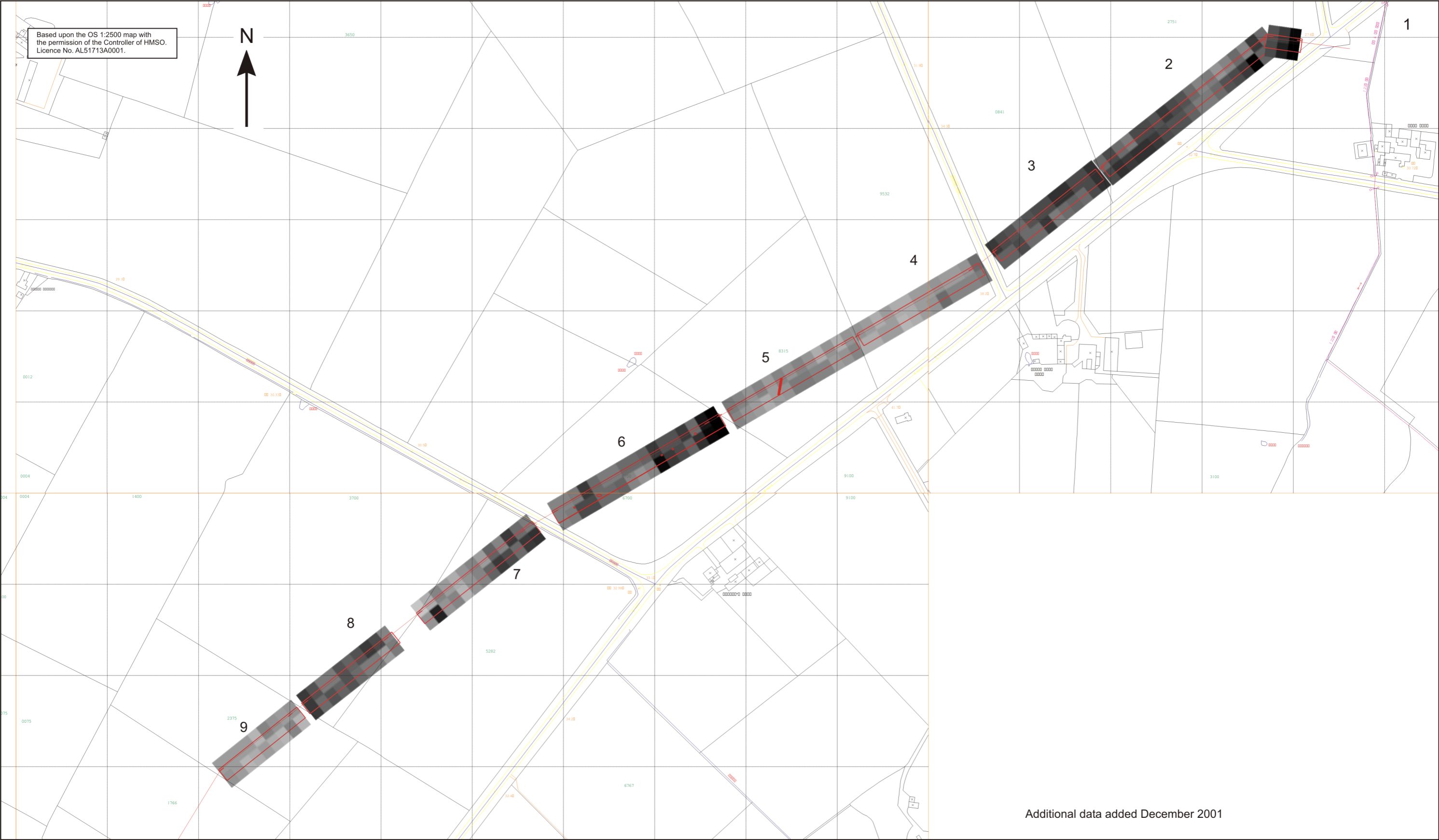


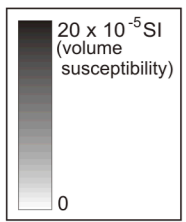
Figure 3: Proposed Tirley to Dymock pipeline and location of plots containing archaeology observed during field and geophysical surveys







[Reproduced at 1:20 000 scale from Ordnance Survey Data with permission of the Controller of Her Majesty's Stationery Office. © Crown Copyright reserved. Licence number AL 52256A]

Based upon the OS 1:2500 map with the permission of the Controller of HMSO. Licence No. AL51713A0001.



Additional data added December 2001

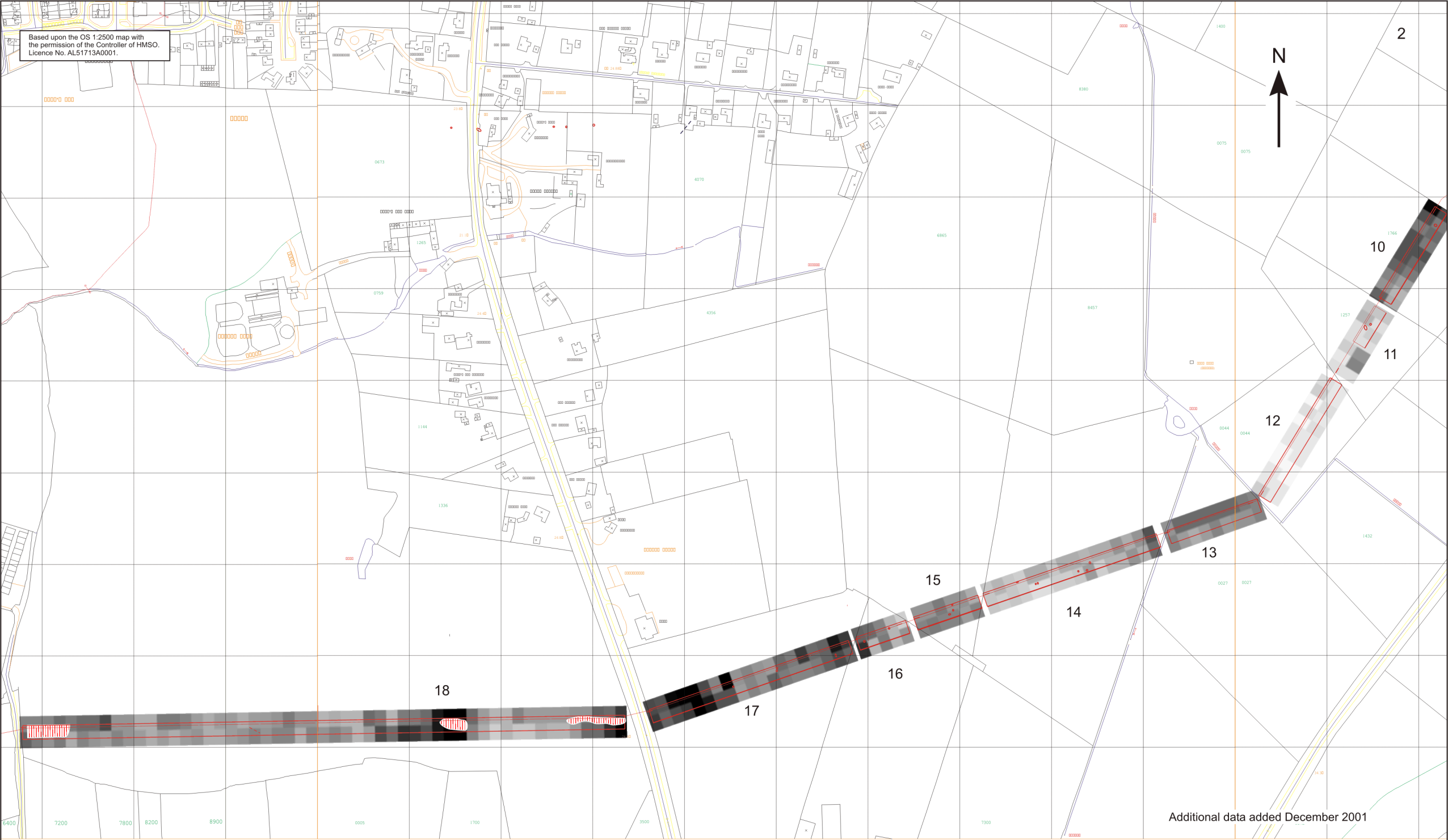


	magnetometer survey		linear magnetic anomalies
	magnetic anomalies		pipe
	magnetically disturbed areas		gas pipe alignment

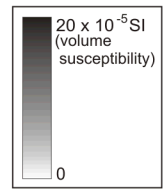


Tirley to Dymock, Gloucestershire
Geophysical Survey of Gas Pipeline 2001
Figure 4: Magnetic Susceptibility Survey
Fields 2 - 9
(with magnetometer survey findings)

Based upon the OS 1:2500 map with the permission of the Controller of HMSO. Licence No. AL51713A0001.



Additional data added December 2001

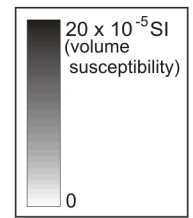
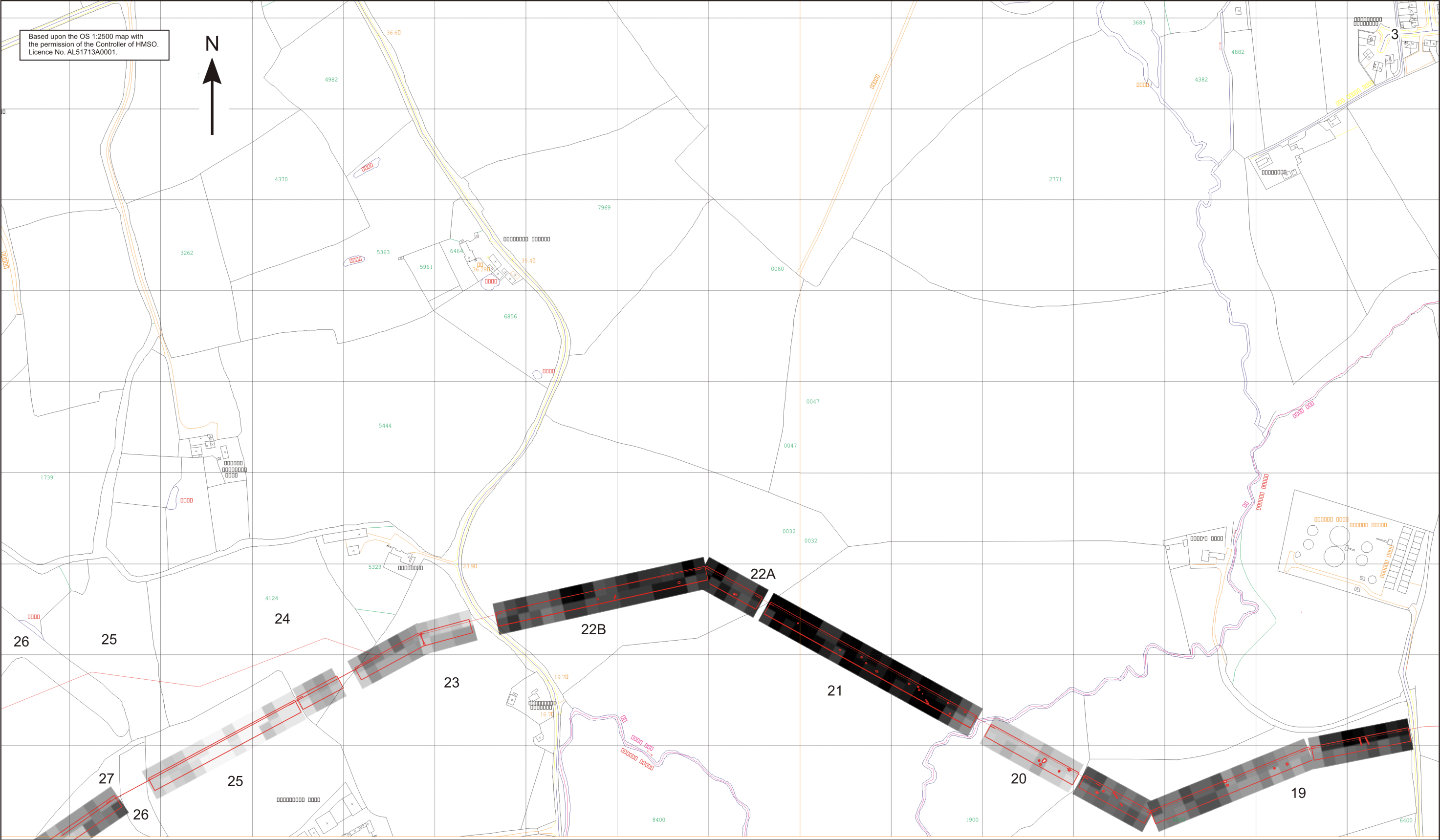


- magnetometer survey
- o magnetic anomalies
- magnetically disturbed areas
- linear magnetic anomalies
- pipe
- gas pipe alignment



Tirley to Dymock, Gloucestershire
Geophysical Survey of Gas Pipeline 2001
Figure 5: Magnetic Susceptibility Survey
Fields 10 - 18
(with magnetometer survey findings)

Based upon the OS 1:2500 map with the permission of the Controller of HMSO. Licence No. AL51713A0001.



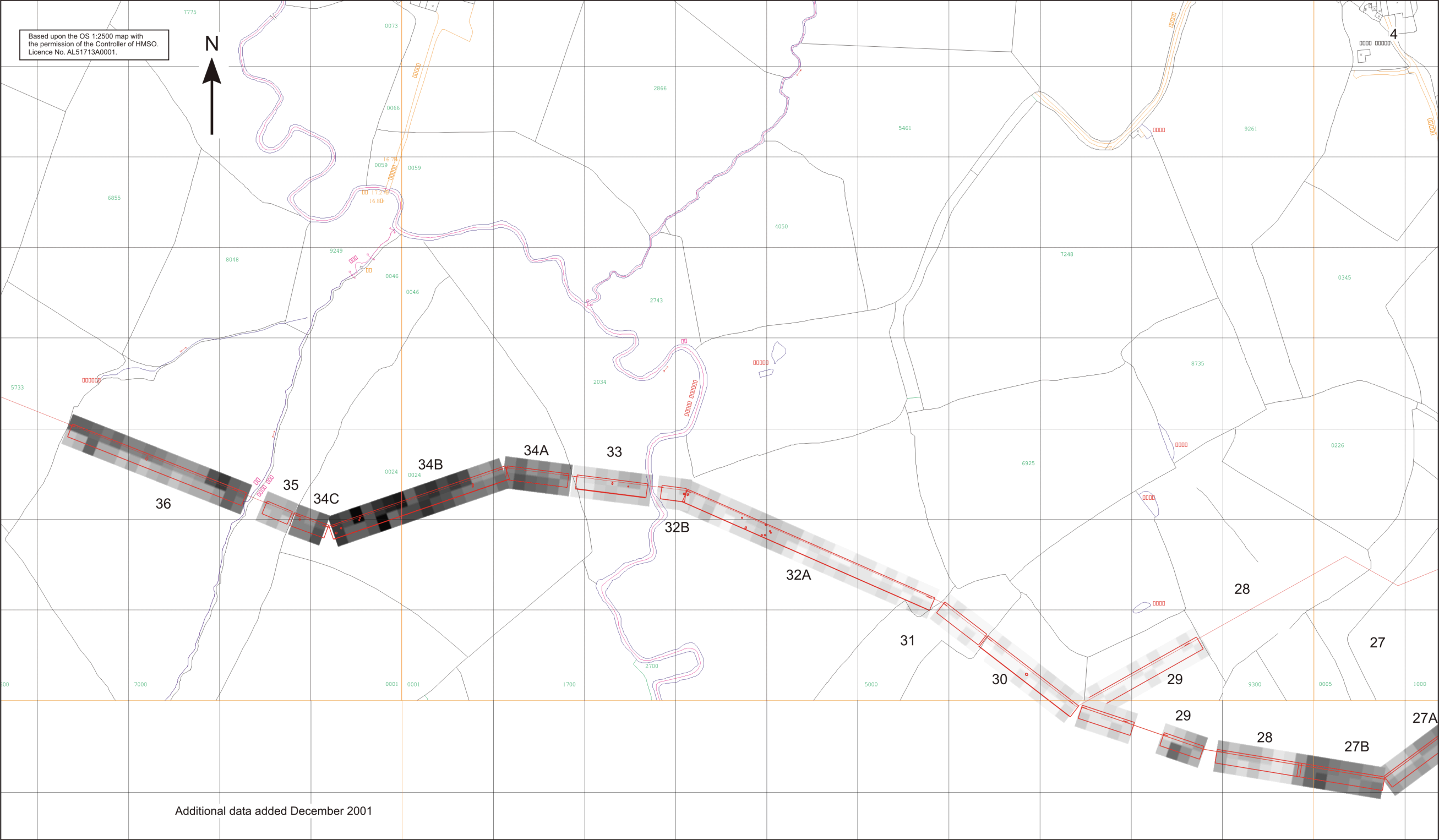
- magnetometer survey
- magnetic anomalies
- magnetically disturbed areas
- linear magnetic anomalies
- pipe
- gas pipe alignment

Additional data added December 2001

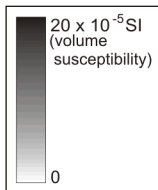








Tirley to Dymock, Gloucestershire
Geophysical Survey of Gas Pipeline 2001
Figure 6: Magnetic Susceptibility Survey
Fields 19 - 26
(with magnetometer survey findings)

Based upon the OS 1:2500 map with the permission of the Controller of HMSO. Licence No. AL51713A0001.



Additional data added December 2001

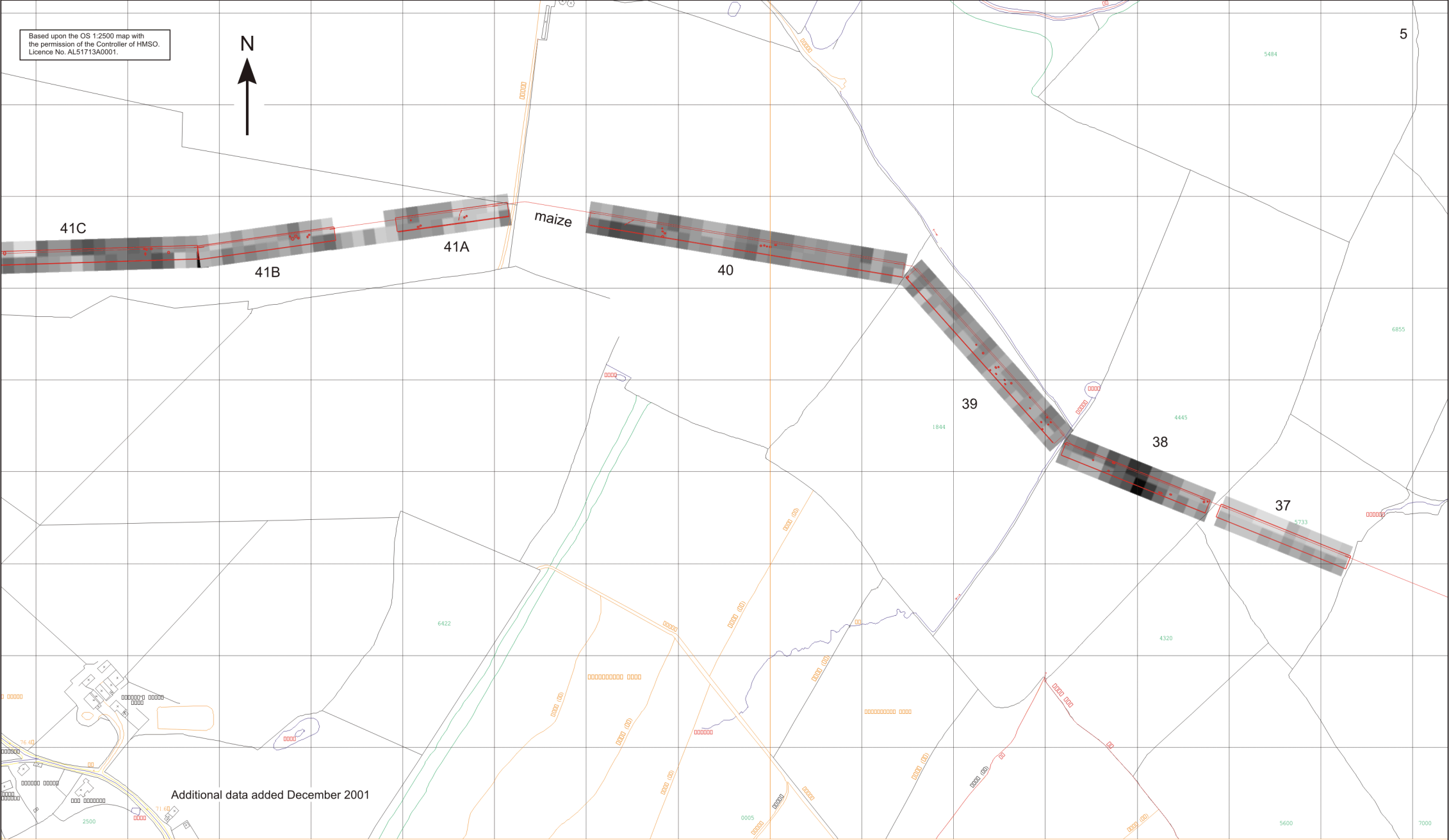


	magnetometer survey		linear magnetic anomalies
	magnetic anomalies		pipe
	magnetically disturbed areas		gas pipe alignment

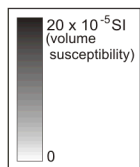








**Tirley to Dymock, Gloucestershire
Geophysical Survey of Gas Pipeline 2001**
Figure 7: Magnetic Susceptibility Survey
Fields 27 - 36
(with magnetometer survey findings)

Based upon the OS 1:2500 map with the permission of the Controller of HMSO. Licence No. AL51713A0001.



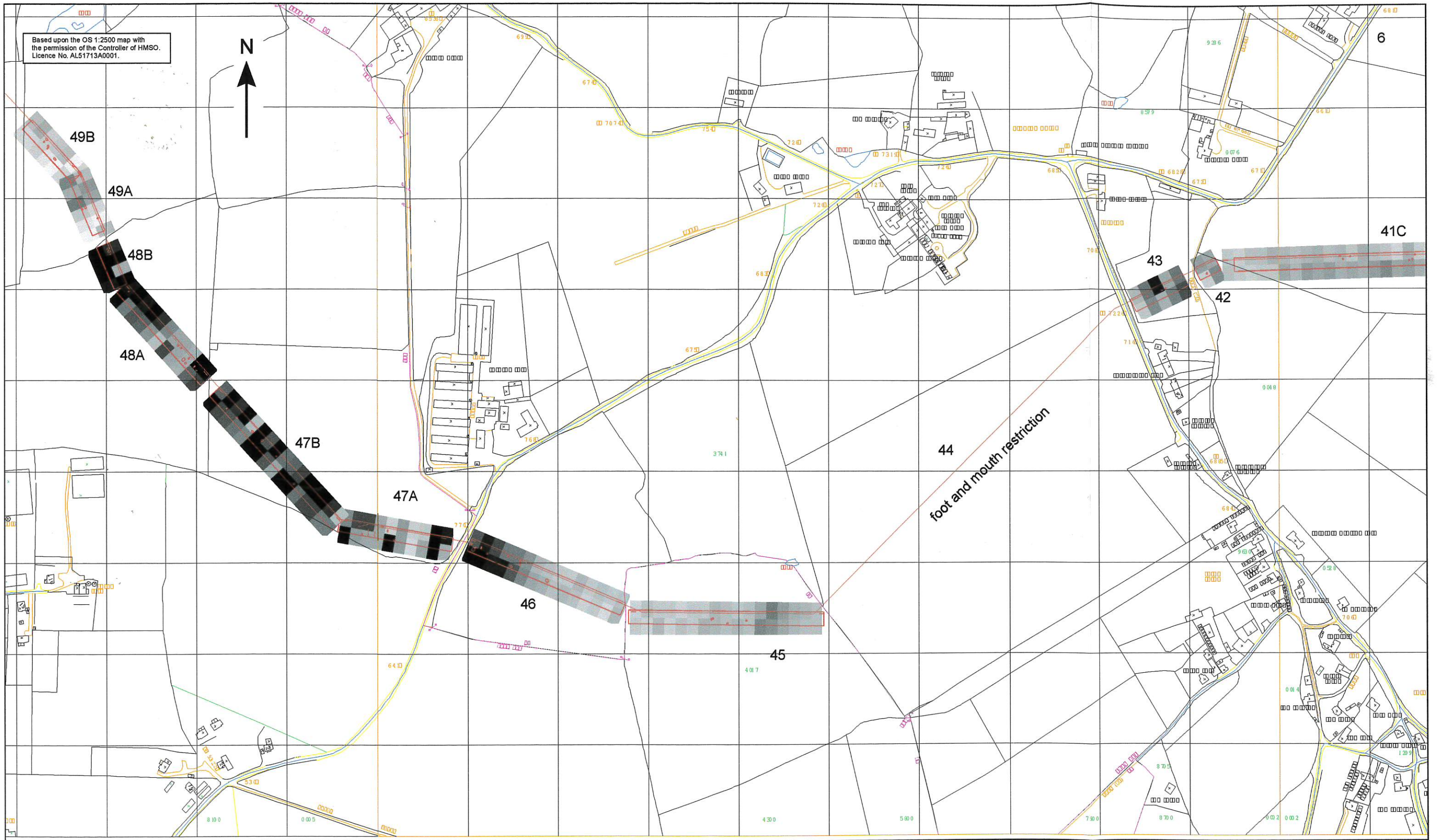
Additional data added December 2001



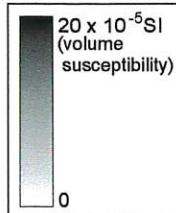
	magnetometer survey		linear magnetic anomalies
	magnetic anomalies		pipe
	magnetically disturbed areas		gas pipe alignment



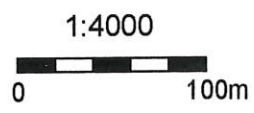
**Tirley to Dymock, Gloucestershire
Geophysical Survey of Gas Pipeline 2001**
Figure 8: Magnetic Susceptibility Survey
Fields 37 - 41
(with magnetometer survey findings)



Based upon the OS 1:2500 map with the permission of the Controller of HMSO. Licence No. AL51713A0001.

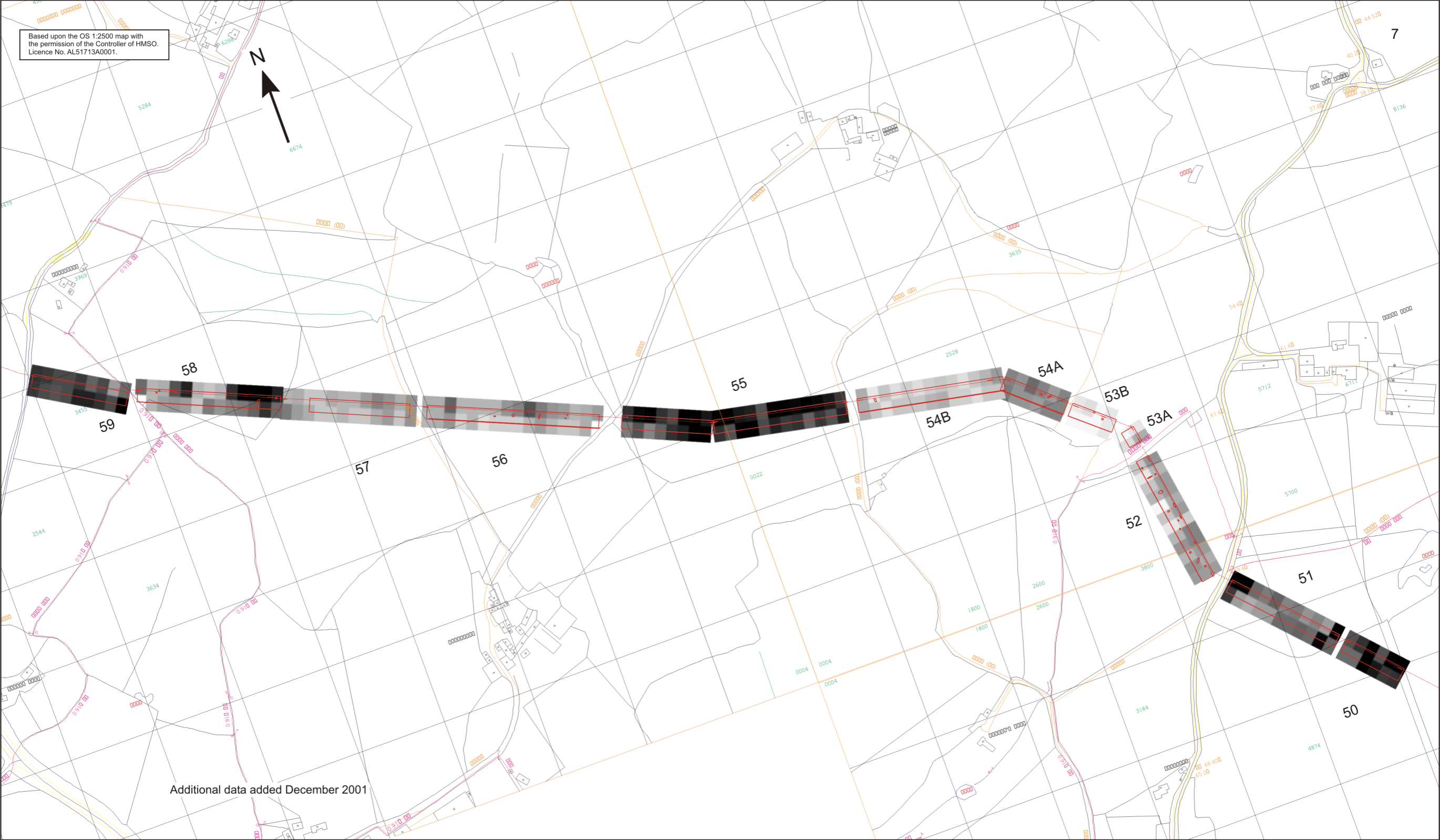


- | | |
|------------------------------|---------------------------|
| magnetometer survey | linear magnetic anomalies |
| magnetic anomalies | pipe |
| magnetically disturbed areas | gas pipe alignment |

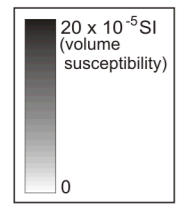








Tirley to Dymock, Gloucestershire
Geophysical Survey of Gas Pipeline 2001
Figure 9: Magnetic Susceptibility Survey
Fields 41 - 49
 (with magnetometer survey findings)

Based upon the OS 1:2500 map with the permission of the Controller of HMSO. Licence No. AL51713A0001.



Additional data added December 2001



	magnetometer survey		linear magnetic anomalies
	magnetic anomalies		pipe
	magnetically disturbed areas		gas pipe alignment

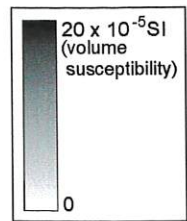








**Tirley to Dymock, Gloucestershire
Geophysical Survey of Gas Pipeline 2001**
Figure 10: Magnetic Susceptibility Survey
Fields 50 - 59
(with magnetometer survey findings)

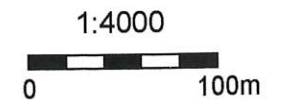
Based upon the OS 1:2500 map with the permission of the Controller of HMSO. Licence No. AL51713A0001.



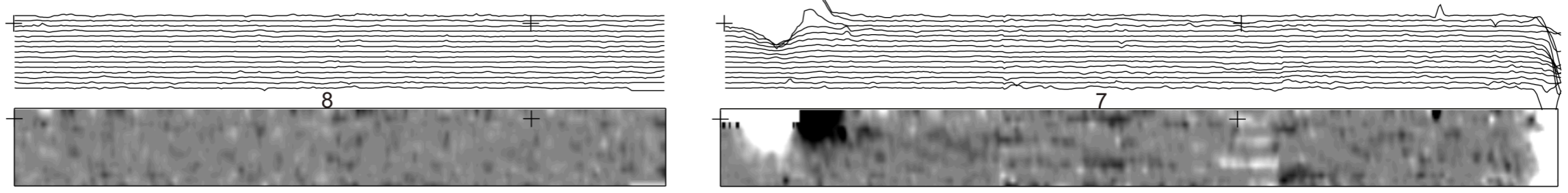
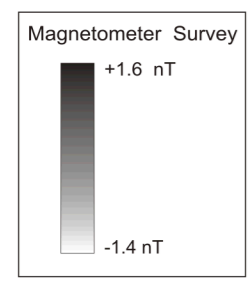
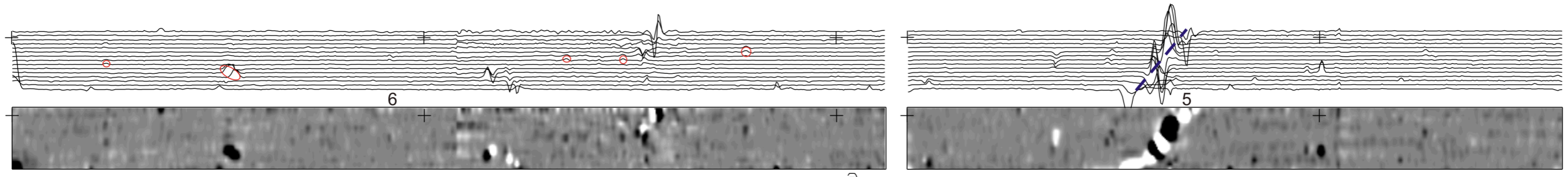
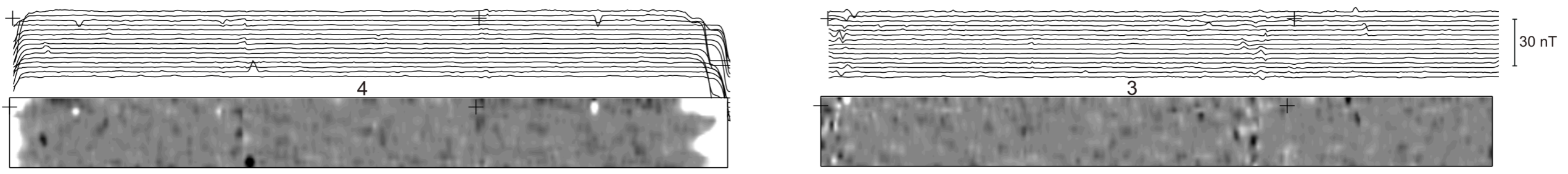
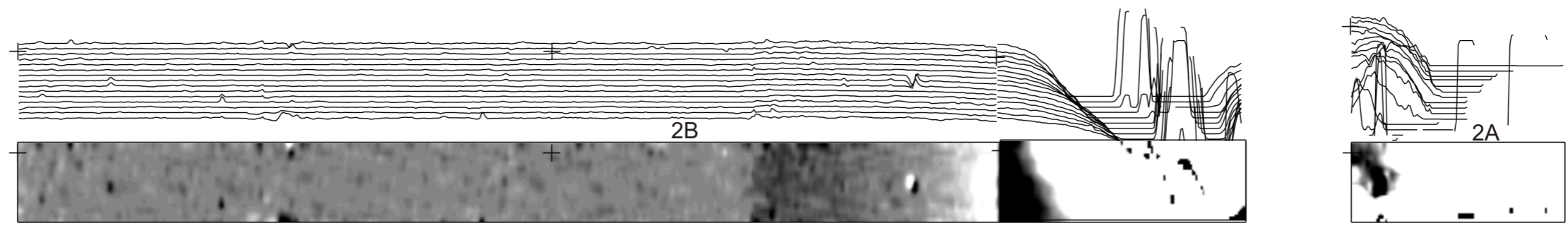
Additional data added December 2001







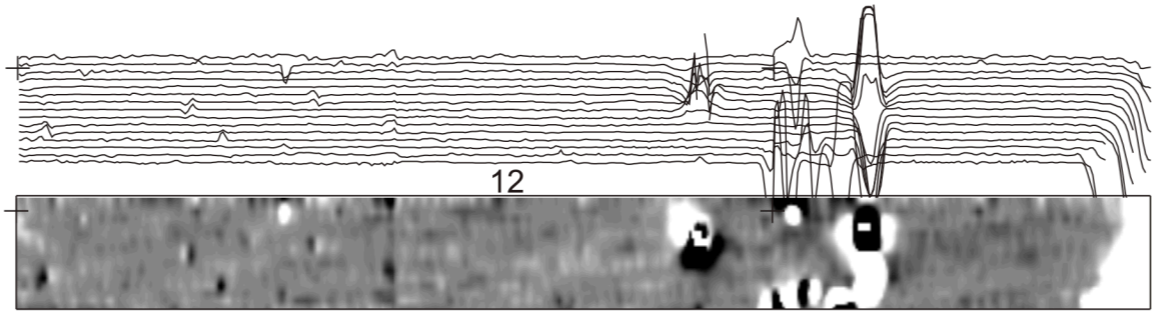
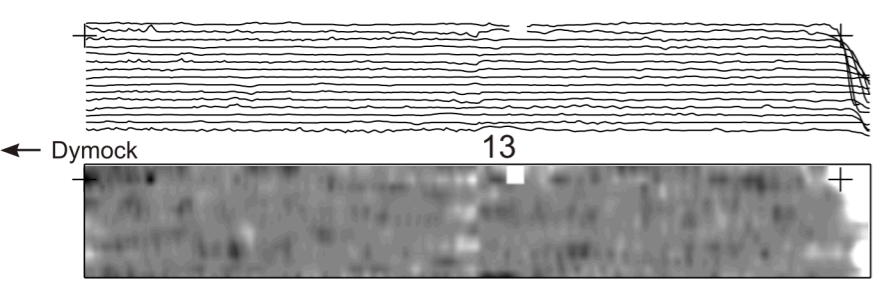
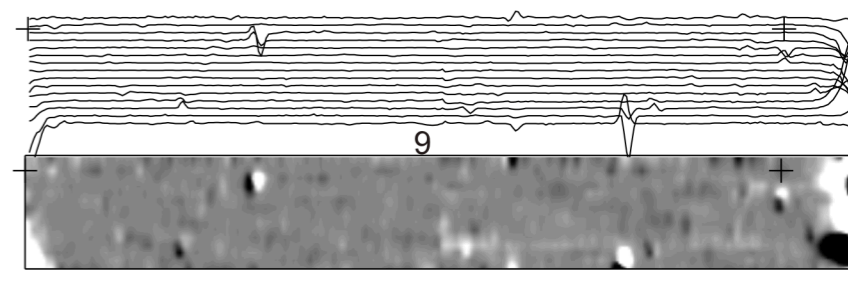
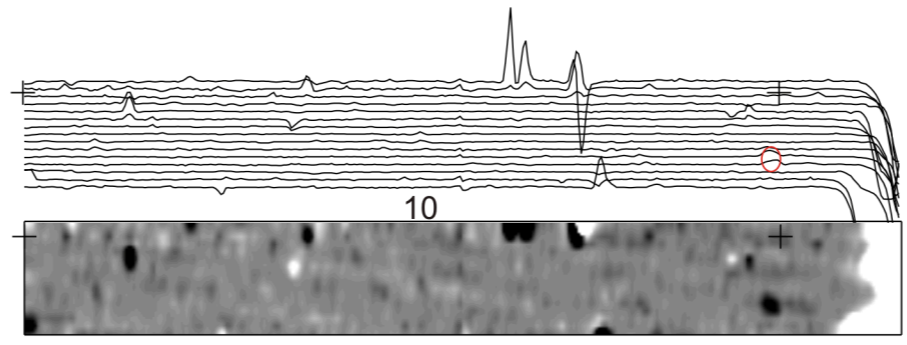
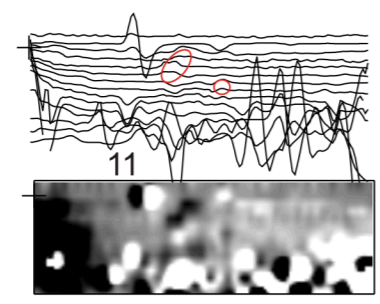
	magnetometer survey		linear magnetic anomalies
	magnetic anomalies		pipe
	magnetically disturbed areas		gas pipe alignment



Tirley to Dymock, Gloucestershire
Geophysical Survey of Gas Pipeline 2001
Figure 11: Magnetic Susceptibility Survey
Fields 60 - 68
(with magnetometer survey findings)

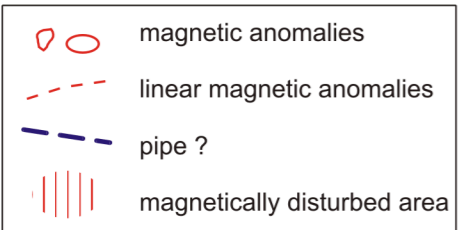
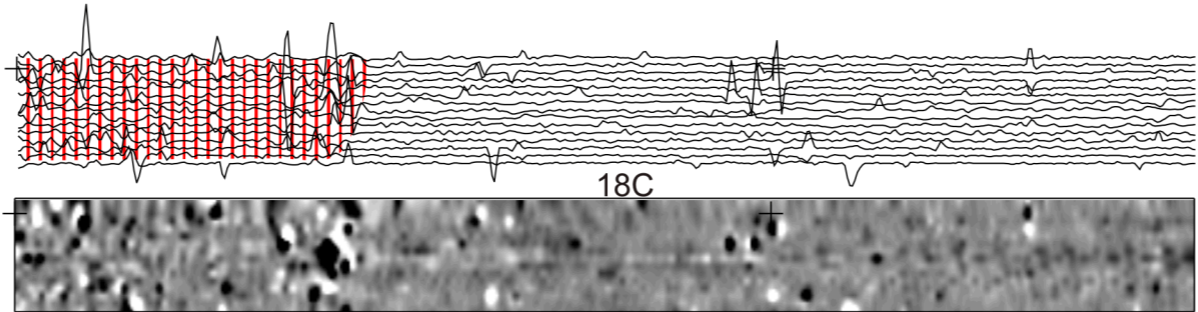
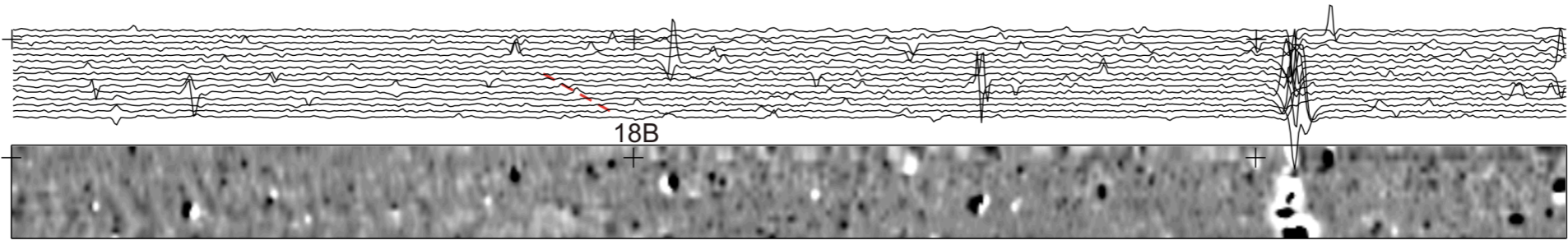
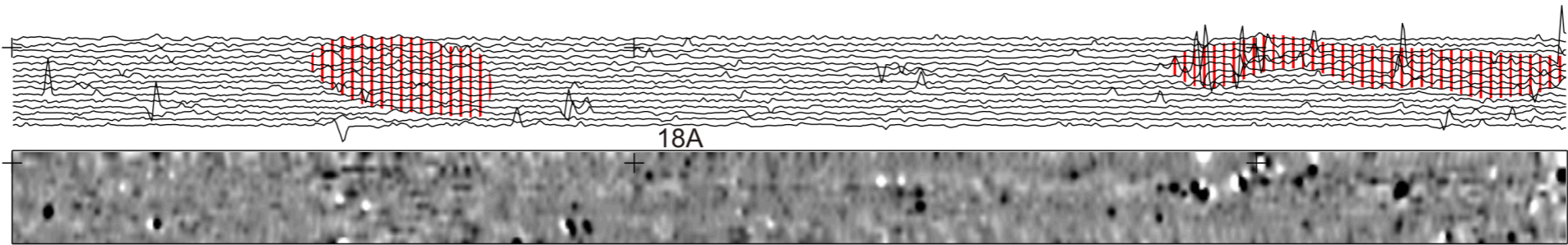
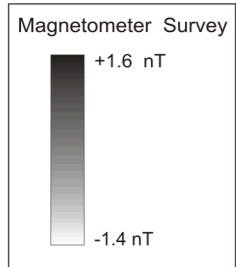
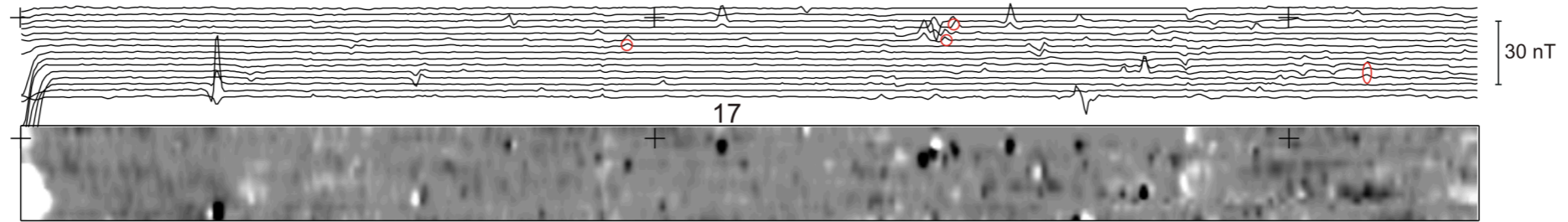
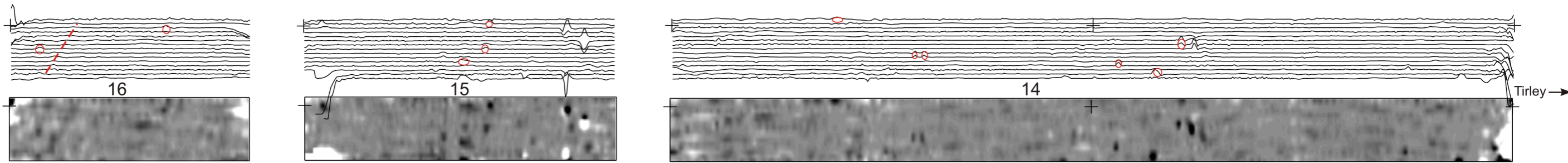


-  magnetic anomalies
-  linear magnetic anomalies
-  pipe ?
-  magnetically disturbed area



Tirley to Dymock, Gloucestershire
 Geophysical Survey of Gas Pipeline Route 2001
 Figure 12: Magnetometer Survey - Fields 2 to 13
 Bartlett-Clark Consultancy 1:1000



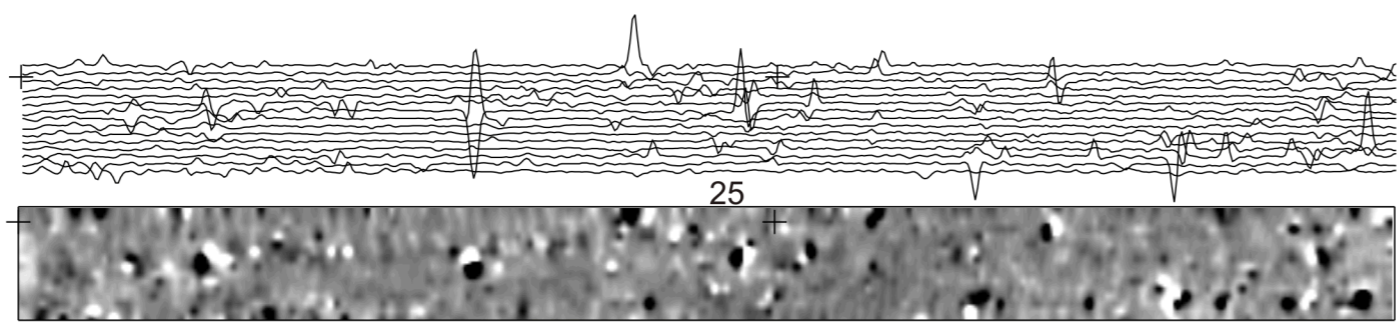
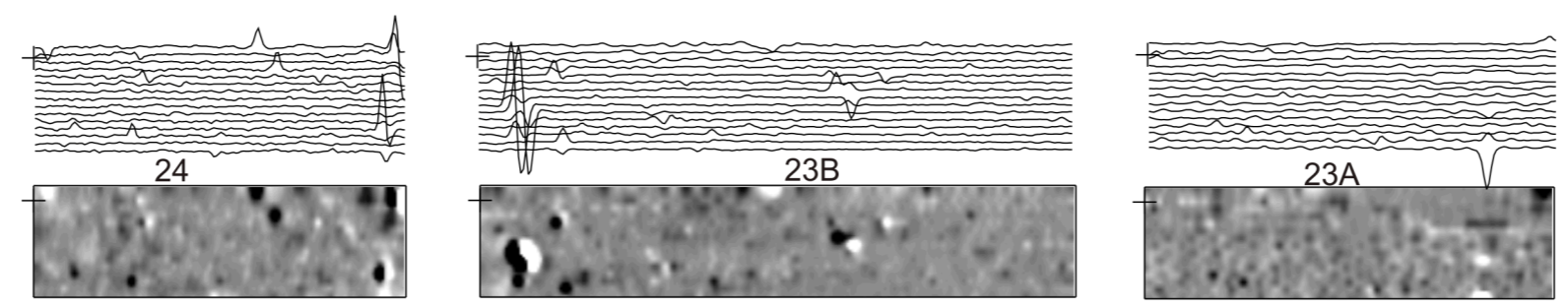
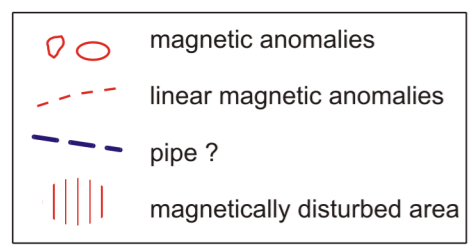
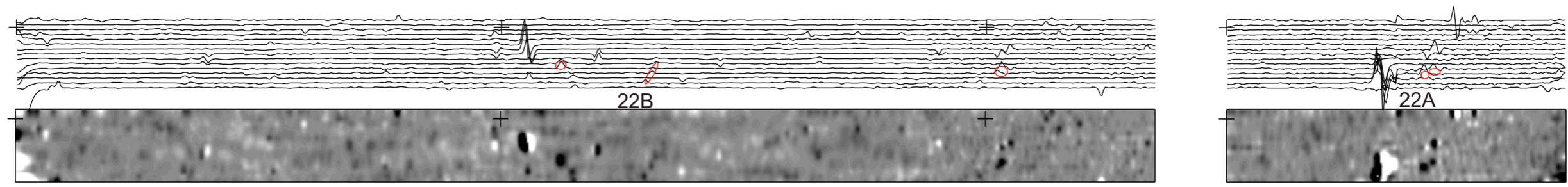
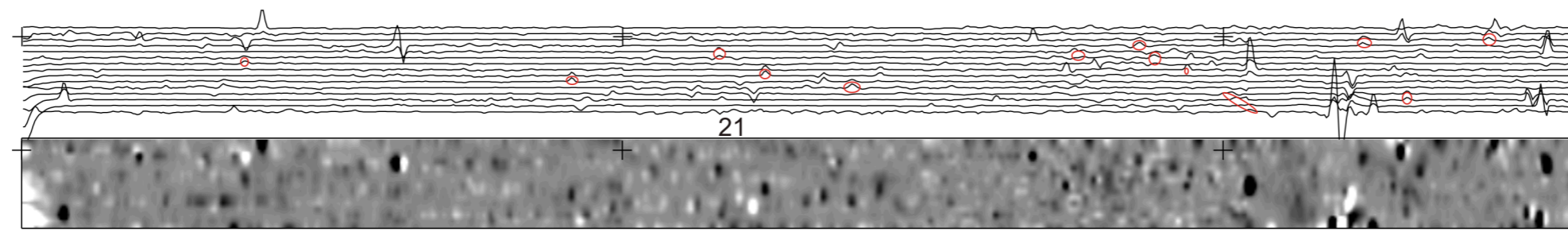
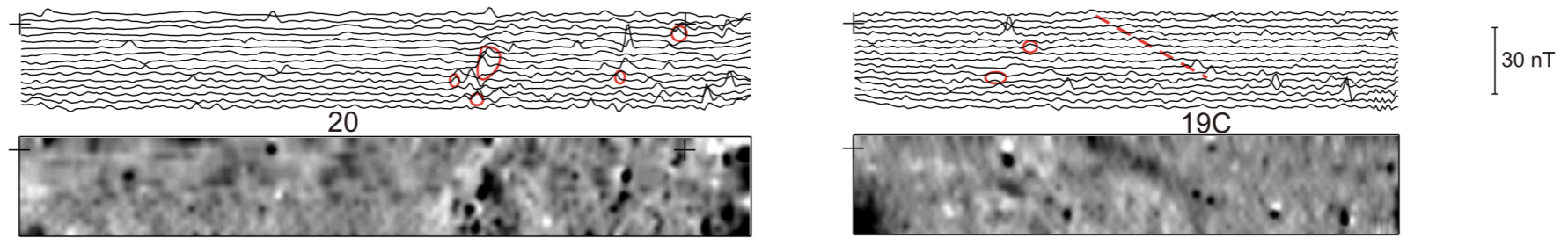
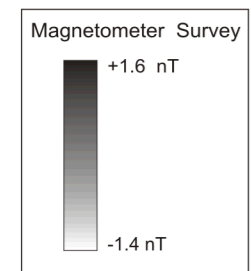
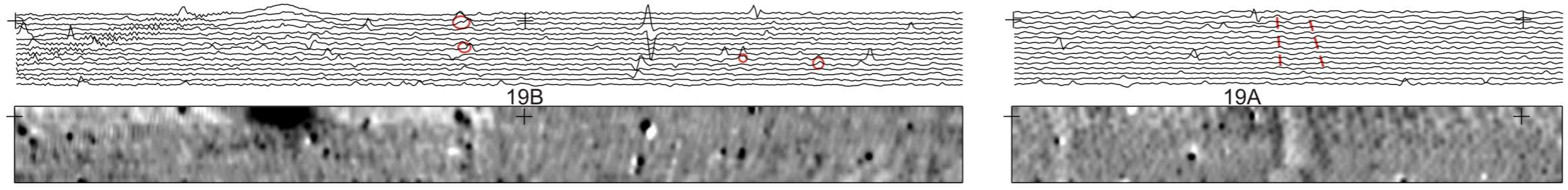


Tirley to Dymock, Gloucestershire
 Geophysical Survey of Gas Pipeline Route 2001
 Figure 13: Magnetometer Survey - Fields 8 to 18
 Bartlett-Clark Consultancy 1:1000

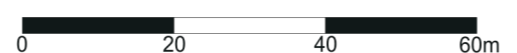
← Dymock



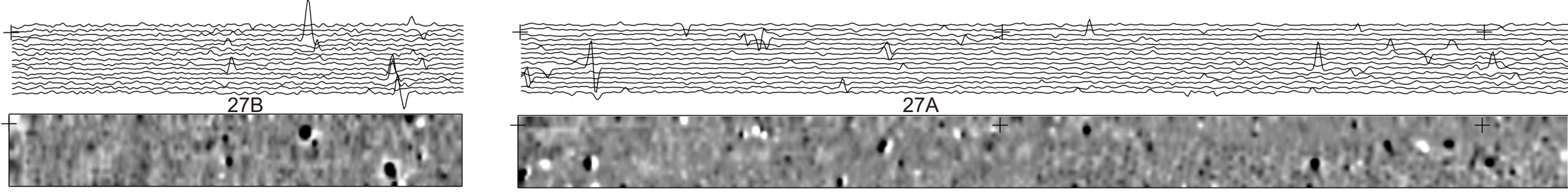
Tirley →







← Dymock

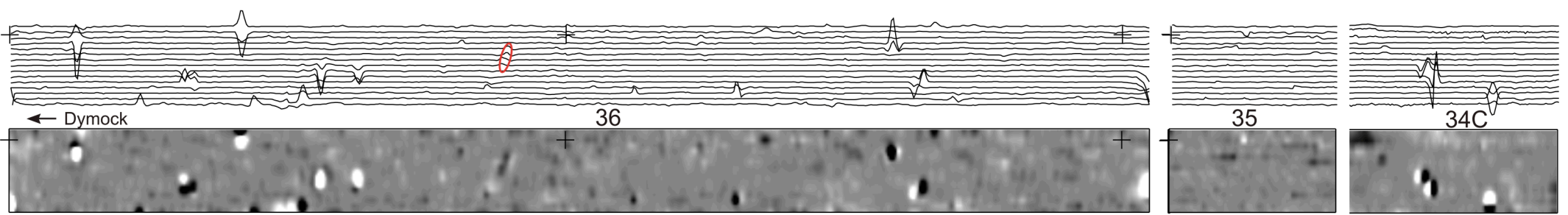
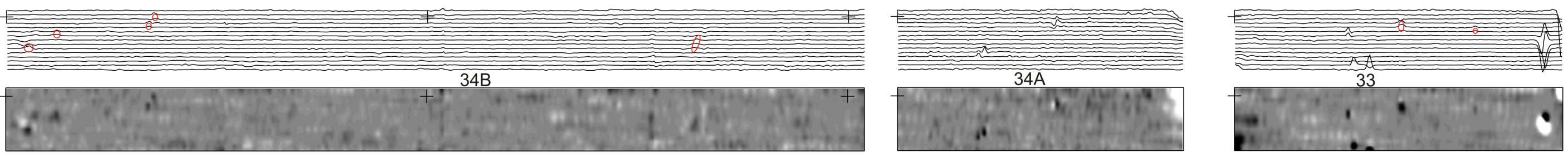
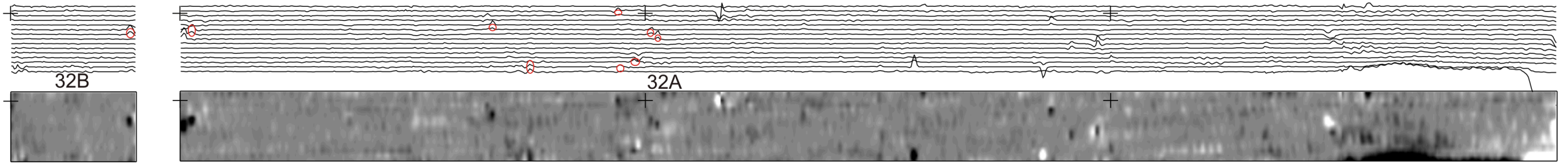
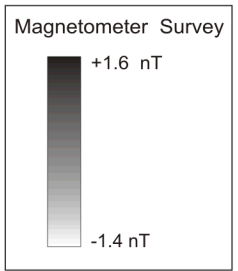
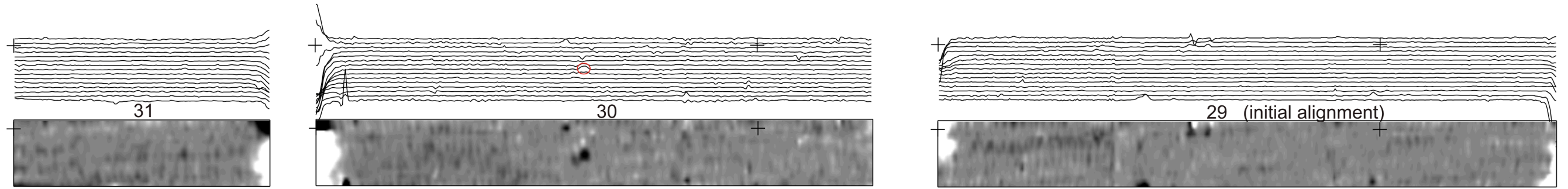
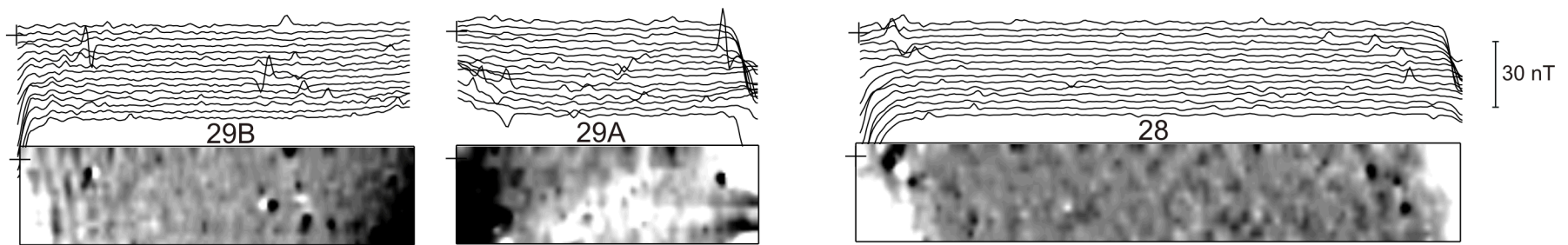


Tirley to Dymock, Gloucestershire
 Geophysical Survey of Gas Pipeline Route 2001
 Figure 14: Magnetometer Survey - Fields 19 - 25
 Bartlett-Clark Consultancy 1:1000



Tirley →

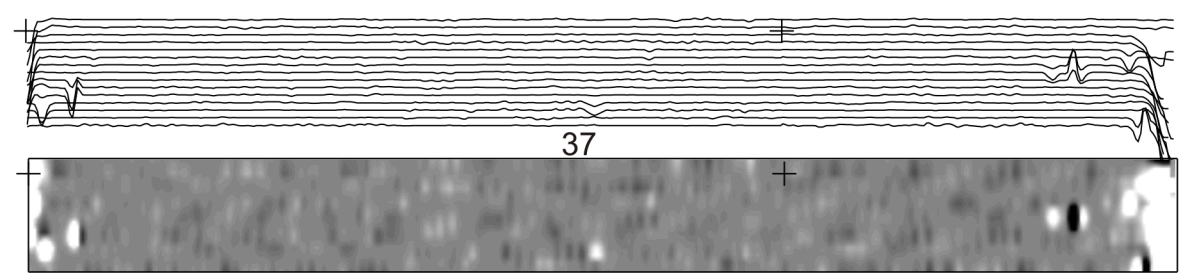
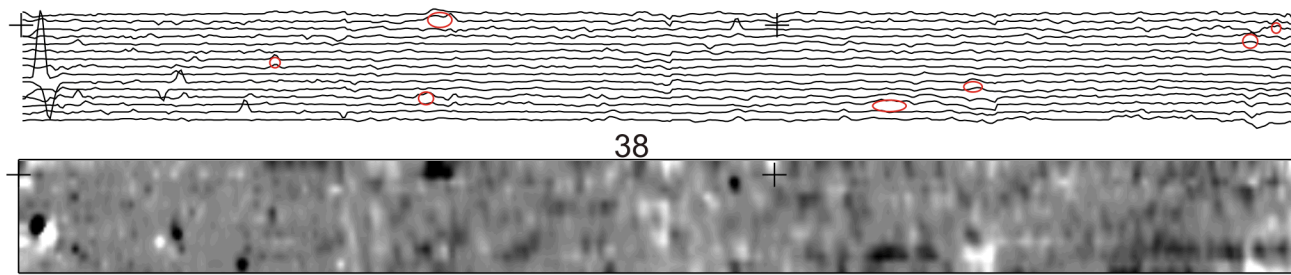
-  magnetic anomalies
-  linear magnetic anomalies
-  pipe ?
-  magnetically disturbed area







← Dymock

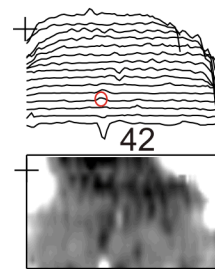
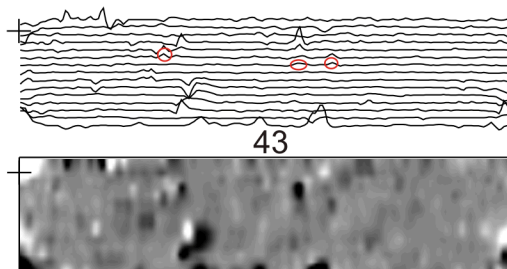
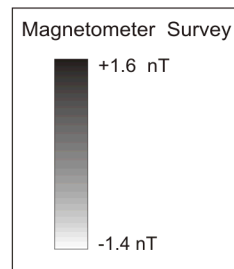
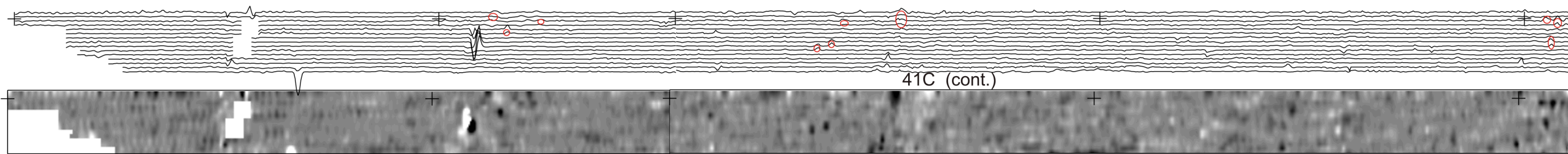
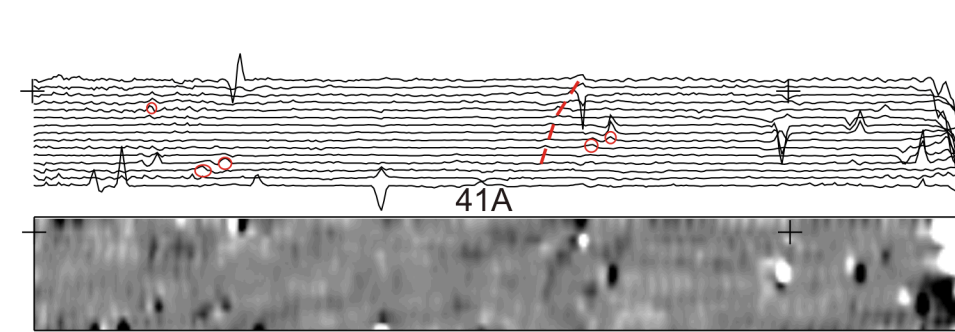
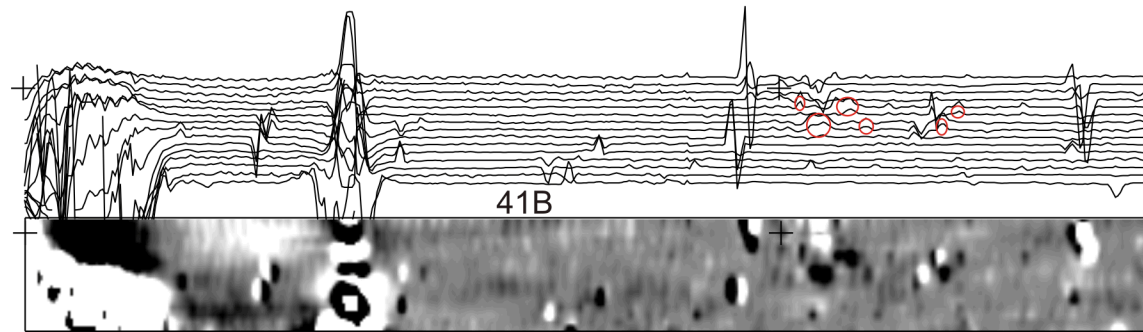
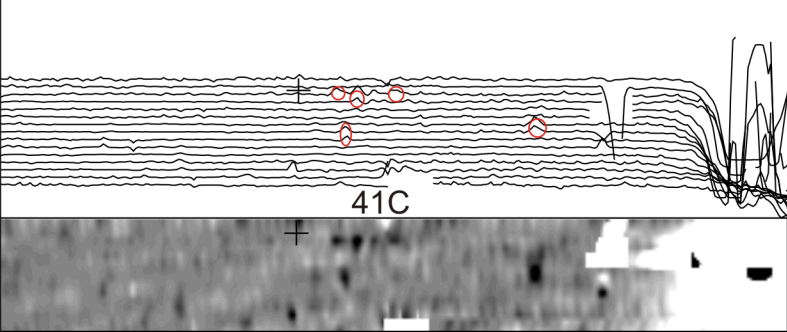
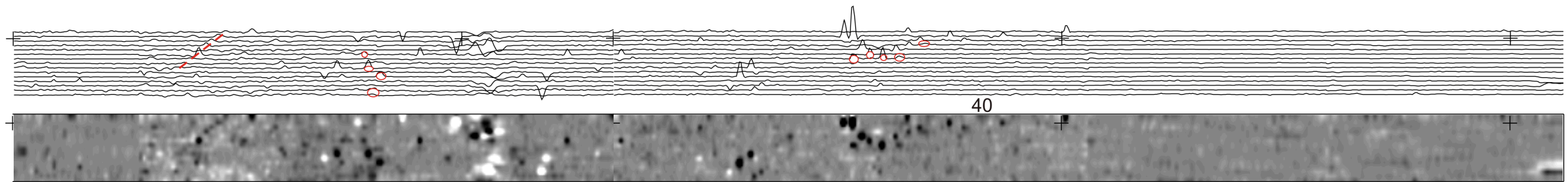
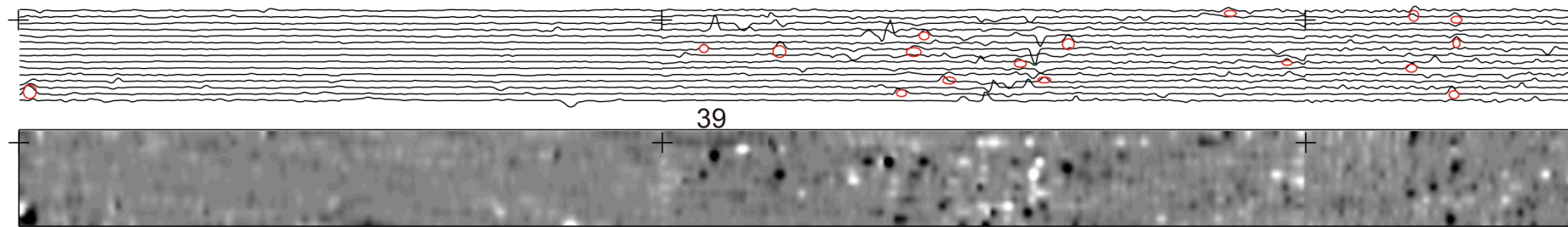
Tirley to Dymock, Gloucestershire
 Geophysical Survey of Gas Pipeline Route 2001
 Figure 15: Magnetometer Survey - Fields 26 - 36
 Bartlett-Clark Consultancy 1:1000





Tirley →

-  magnetic anomalies
-  linear magnetic anomalies
-  pipe ?
-  magnetically disturbed area

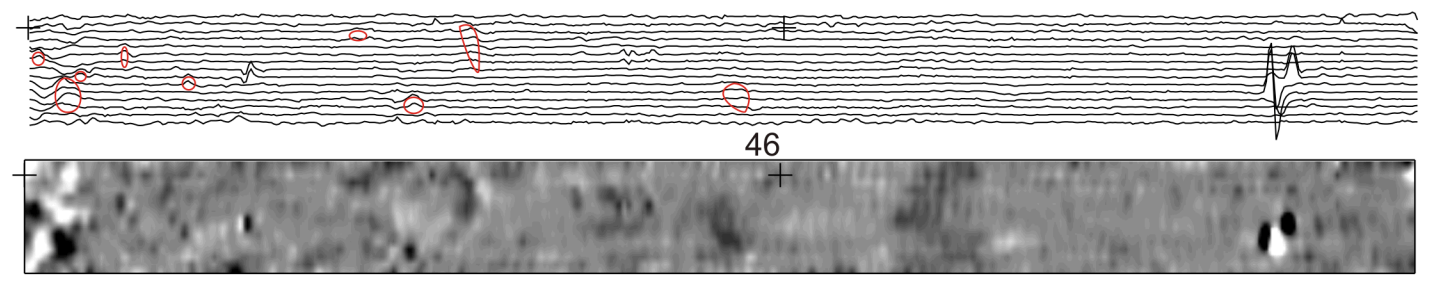
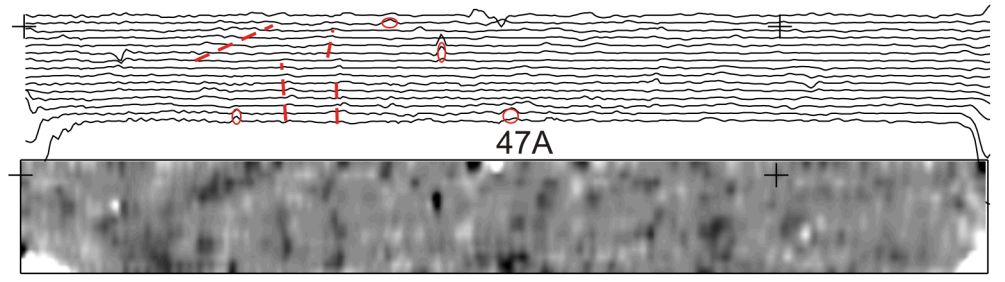
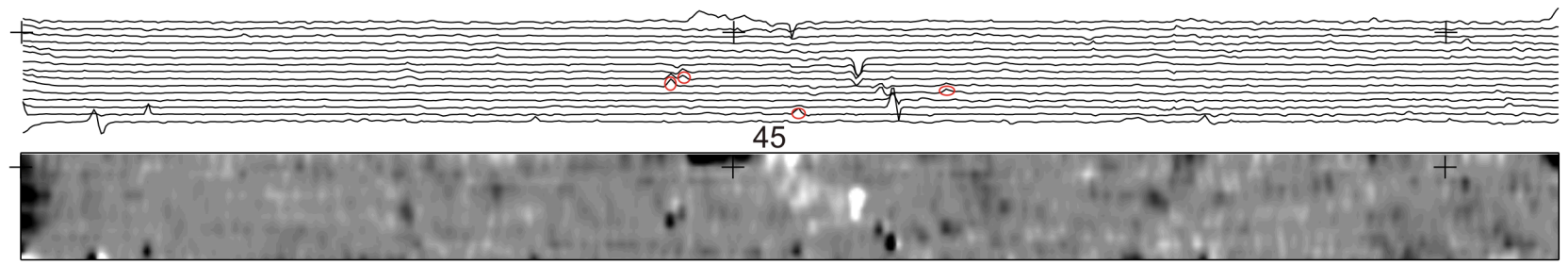


← Dymock

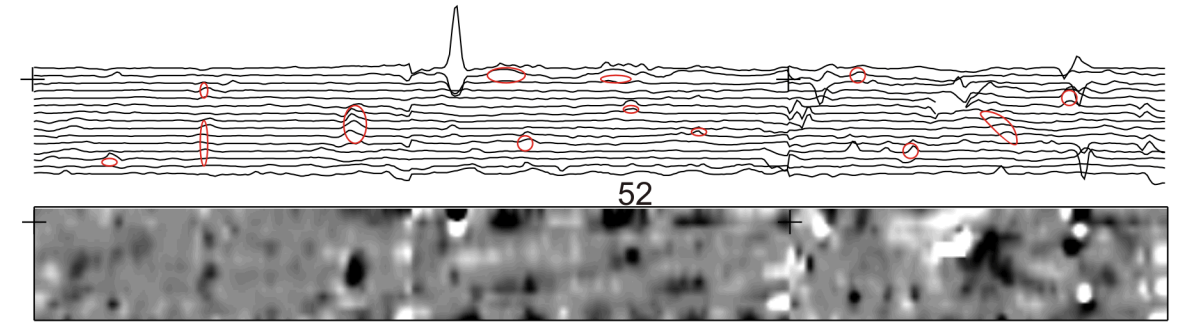
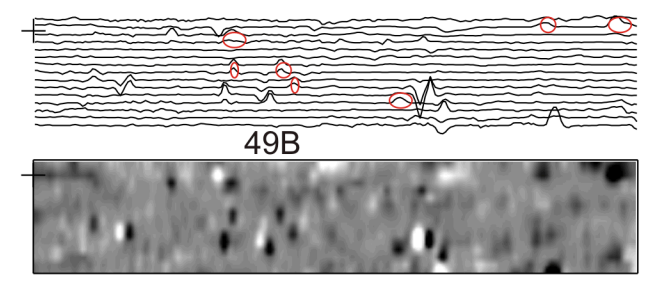
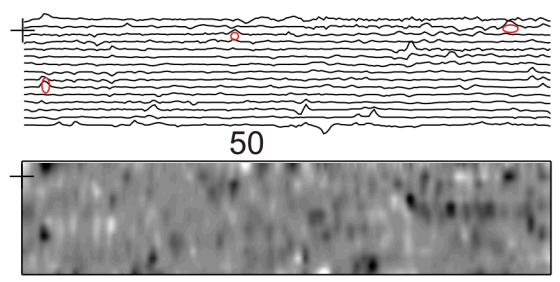
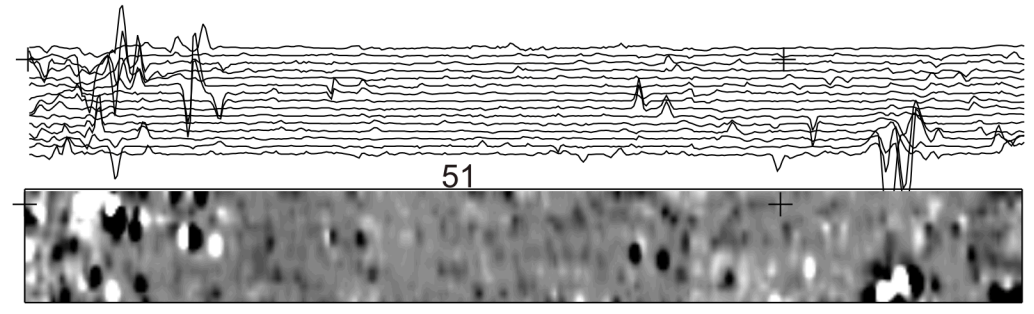
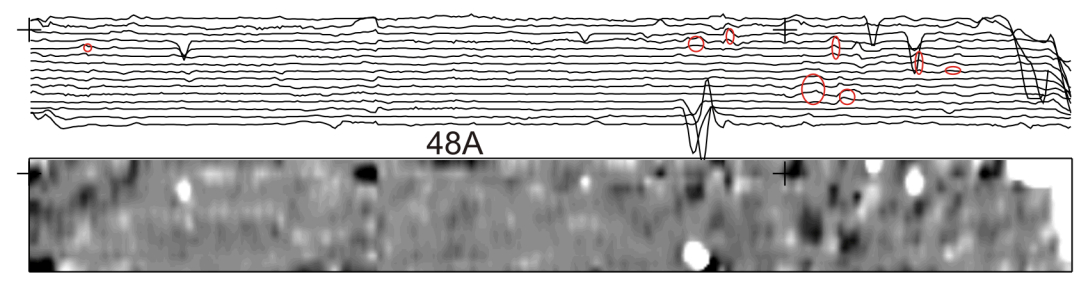
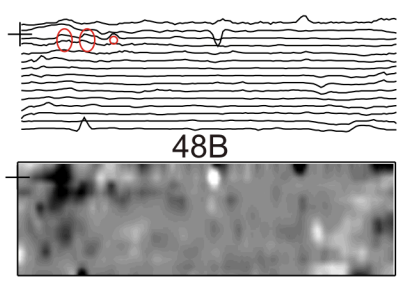
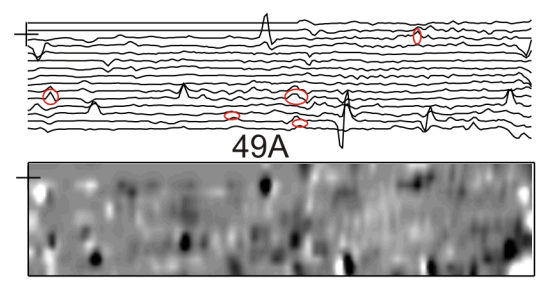
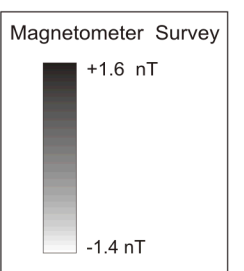
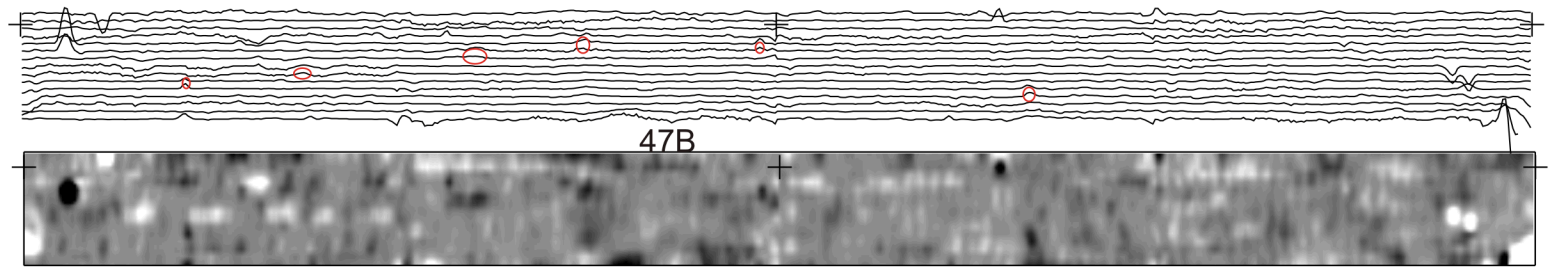


Tirley to Dymock, Gloucestershire
 Geophysical Survey of Gas Pipeline Route 2001
 Figure 16: Magnetometer Survey - Fields 37 to 43
 Bartlett-Clark Consultancy 1:1000

Tirley →



- magnetic anomalies
- linear magnetic anomalies
- pipe ?
- magnetically disturbed area

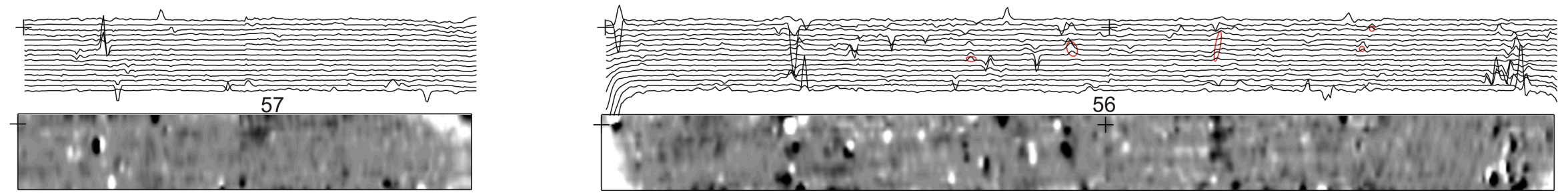
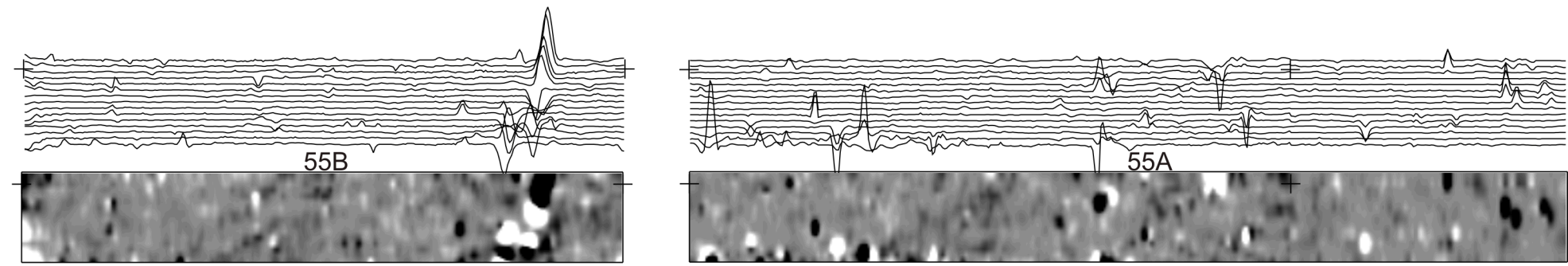
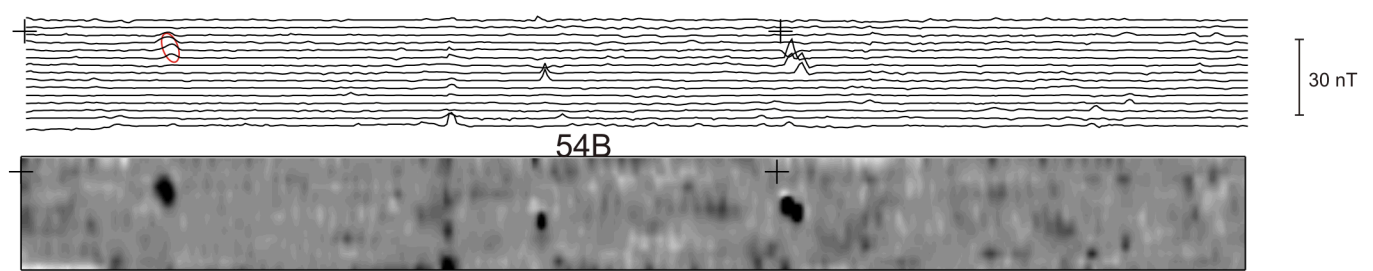
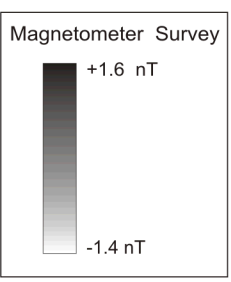
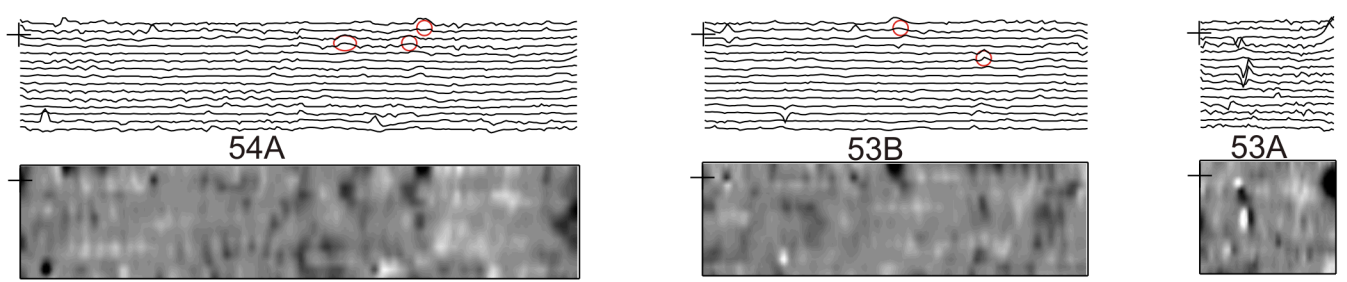


← Dymock

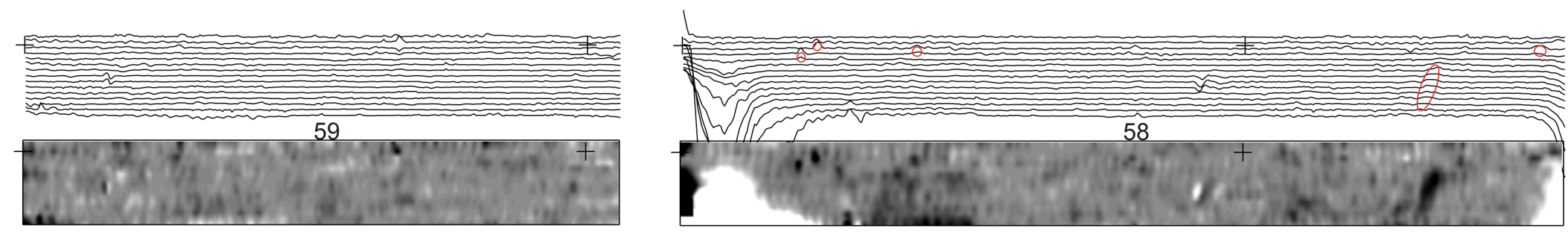






Tirley to Dymock, Gloucestershire
 Geophysical Survey of Gas Pipeline Route 2001
 Figure 17: Magnetometer Survey - Fields 45 to 52
 Bartlett-Clark Consultancy 1:1000

Tirley →



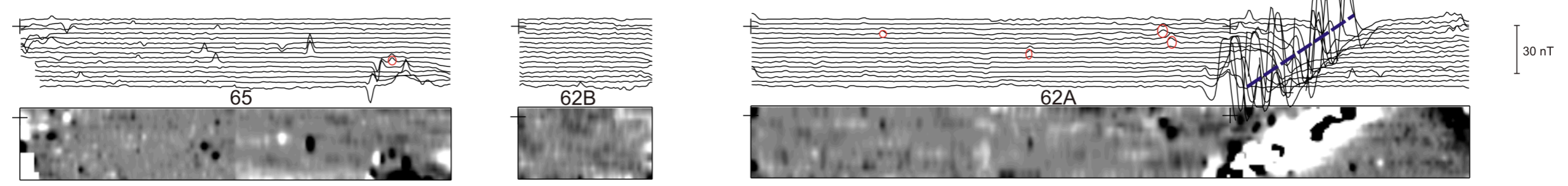
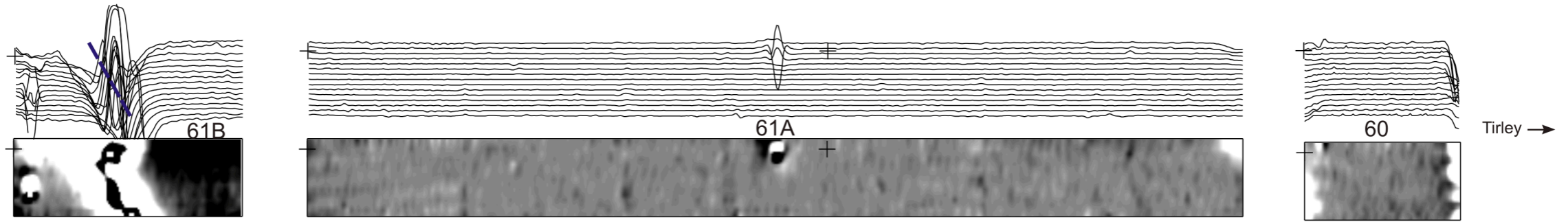
← Dymock







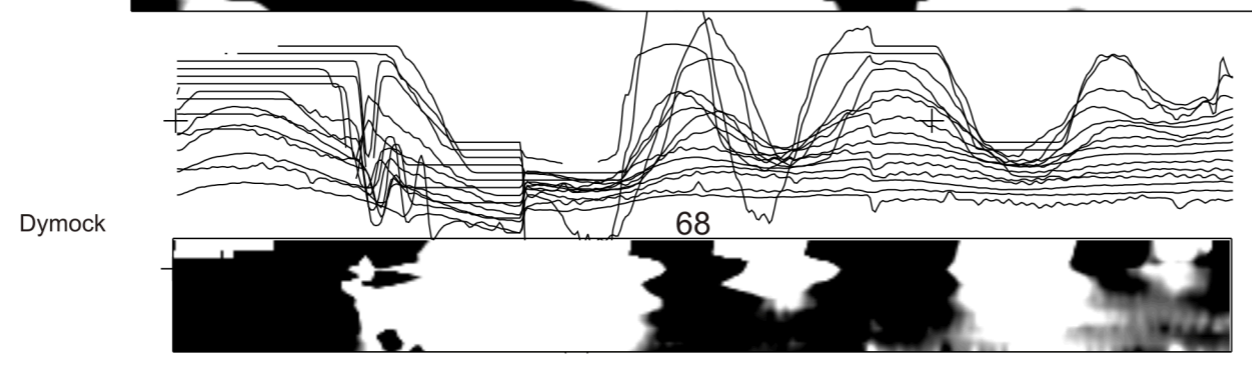
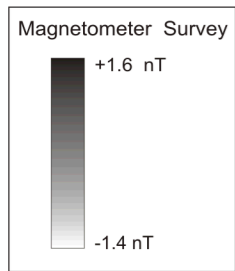
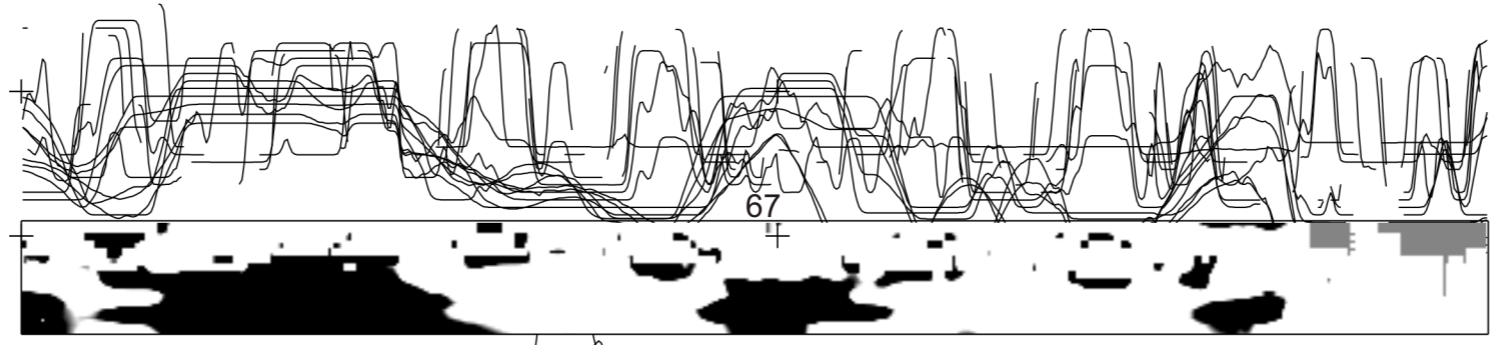
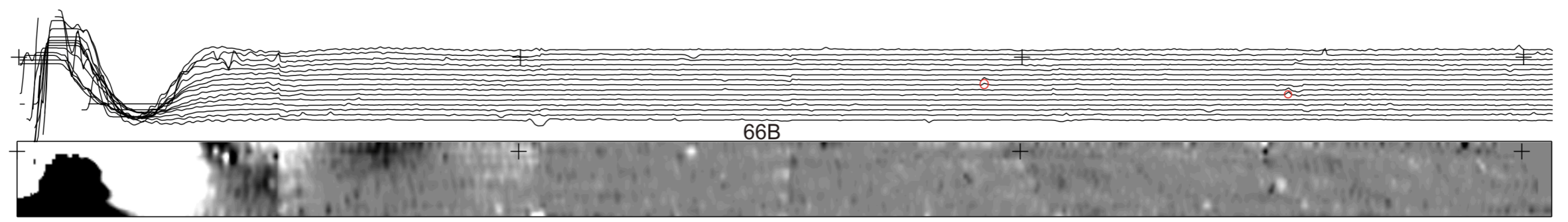
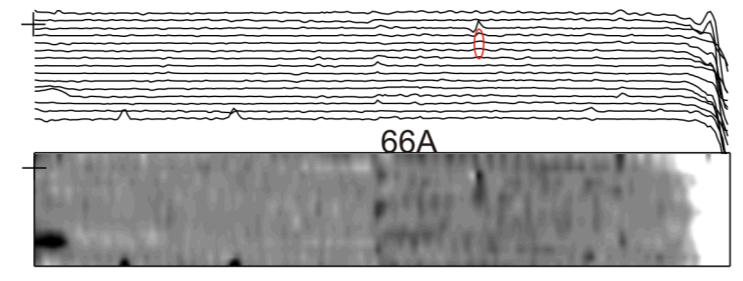
-  magnetic anomalies
-  linear magnetic anomalies
-  pipe ?
-  magnetically disturbed area

Tirley to Dymock, Gloucestershire
 Geophysical Survey of Gas Pipeline Route 2001
 Figure 18: Magnetometer Survey - Fields 53 - 59
 Bartlett-Clark Consultancy 1:1000





 magnetic anomalies
 linear magnetic anomalies
 pipe ?
 magnetically disturbed area



Tirley to Dymock, Gloucestershire
 Geophysical Survey of Gas Pipeline Route 2001
 Figure 19: Magnetometer Survey - Fields 60 to 68
 Bartlett-Clark Consultancy 1:1000

